THE LETTUCE CONNECTION

A re-examination of the association of the Egyptian god Min with the lettuce plant from the Predynastic to the Ptolemaic Period.

A thesis submitted to the University of Manchester for the degree of Doctor of Philosophy in the Faculty of Life Sciences

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ABSTRACT: THE LETTUCE CONNECTION

A re-examination of the association of the Egyptian god Min with the lettuce plant
from the Predynastic to the Ptolemaic Period

A thesis submitted to the University of Manchester for the degree of Doctor of
Philosophy in the Faculty of Life Sciences (January 2015)

Min was one of the earliest known Egyptian deities and his origins remain obscure
but, because of his association with fertility and the kingship, he retained his
importance from the Predynastic Period into the Roman era. Although his
depiction as an ithyphallic, mummified male with a flail balanced above his raised
right arm remained unaltered throughout, the overall iconography of Min did
exhibit changes, notably with the introduction in the Sixth Dynasty of what is
accepted as a lettuce plant resembling the modern Cos or Romaine cultivar of
*Lactuca sativa* L. It is the association of Min with the lettuce plant that is the
subject of this thesis.

It is the received opinion in the literature that the plant was offered to Min, a
fertility god, as an aphrodisiac. Apart from two seminal works that are over fifty
years old, little research has been conducted into the association of Min with the
lettuce. Much early research is in need of re-examination because of changes in
social attitudes and research techniques and this the thesis seeks to redress. The
aims of the research are to review the evidence for the lettuce plant in ancient
Egypt and to re-examine the previously noted association of the god Min with a
plant identified as lettuce.

The study is primarily library and museum based and examines the history and
nature of lettuce in ancient Egypt. The nature of “aphrodisiac” is examined and
the use of such substances in ancient Egypt is compared with modern usage. Min
as a god of fertility is re-analysed and finally, texts and Ptolemaic temple
inscriptions are examined for evidence as to why and by whom lettuce was
offered. The research results are applied to a study of Min as a god of fertility.

The evidence indicates that lettuce was offered by the king to Min to ensure the
fertility and regeneration of agriculture and of the king which would secure the
continuation of his line and humanity. There is no evidence to suggest lettuce was
offered as an aphrodisiac to increase the sexual desire of the god.

Pauline Norris
ABBREVIATIONS

BAR  British Archaeological Reports
BD  Book of the Dead
BM  British Museum
CGC  Catalogue Général des Antiquités du Musée du Caire
COED  Concise Oxford English Dictionary
CT  Coffin Texts


www.dendara.net
[Accessed 17 January 2014]


JE  Journal d’Entrée, Egyptian Museum, Cairo.


OIP  Oriental Institute Publications

PGM XII and PDM xii: the magical handbooks in Papyrus Leiden I 384

PM  PORTER, B. & MOSS, L.B. & MÁLEK, J. (1927- ongoing)

PT  Pyramid Texts

RAIN  Journal of Royal Anthropological Institute of Great Britain & Ireland

RPSGB  Royal Pharmaceutical Society of Great Britain

Sp. Pl.  Species plantarum see LINNAEUS in Bibliography

Top. Bib. Topographical Bibliography
Trans. Translator

Urk Urkunden des ägyptischen Altertums


WHO World Health Organisation
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DECLARATION

No portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.
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CHAPTER I
INTRODUCTION, LITERATURE REVIEW AND METHODOLOGY

1-1 Introduction
Min was one of the earliest Egyptian deities (Gauthier 1931a: 17). His exact origins remain unknown but, because of his association with fertility and the perpetuation of the kingship, he retained his importance from the Predynastic Period to the Roman conquest of Egypt (Bleeker 1956: 1; McFarlane 1995: 1). His depiction as an ithyphallic, mummified male with a flail balanced above his raised right arm remained unaltered throughout pharaonic history, but the overall iconography of Min also included a number of other attributes associated with the god, the most important of which included the $\textit{shnt}$; the $\textit{shn}$; the $\textit{pr.t}$ festival; the $\textit{hsp}$ and the $\textit{htf}$ (Bleeker 1956: 47; Goedicke 2002: 248-9). Perhaps the most significant of these attributes is what is generally accepted to be a lettuce plant resembling the modern Cos or Romaine cultivar of Compositae (synonym Asteraceae) $\textit{Lactuca sativa}$ L. Sp. Pl. 2: 795. 1753. ¹ Evidence indicates that, from the Sixth Dynasty onwards, the iconography of Min frequently incorporated one or more examples of this plant (Couyat and Montet 1912: no. 63, pl. xvi; Weill 1912: 42; Goedicke 1967: 42).

Early Egyptologists speculated that the ancient Egyptians offered lettuce to Min because it was an aphrodisiac and this speculation persists. Attitudes toward this interpretation remained ambivalent but began to change toward the end of the twentieth century and, in 1931, Gauthier expressed doubt about the concept of the lettuce as an aphrodisiac ‘...la laitue soi-disant aphrodisiaque...’ (1931a: 9, continuation of footnote 3 from page 8). Following Gauthier’s lead, a minority of researchers began to question the concept but, even so, there appears to have been scant new research into the subject (Germer 1980: 85-87; Patanè 1982: 86; Defossez 1985: 1-4; Broze 1996: 94, 251).

The next section of this chapter reviews the seminal literature concerning both

¹ In a botanically focused thesis it is the convention to cite the creation of a species name with the full author string at the first reference to a plant. On the advice of a professional botanist, as this is not a botanical thesis and for ease of reading, the initial full reference for $\textit{Lactuca sativa}$ is given but subsequent references to all other plants are given in their binomial form e.g. $\textit{Lactuca virosa}$. It is the convention thereafter to omit the $L.$ after species published by Linnaeus.
Min and the lettuce, followed by a review of the social attitudes which have affected the study of Min. Finally, details of limitations to the study and the methodology adopted in this thesis are outlined.

1-2 Literature review
No single work focuses exclusively on Min and his association with the lettuce but there is a wide range of evidence about aspects of Min and his attributes in both popular and academic publications.

1-2-1 Seminal works
There are two seminal works concerning Min and his festivals, both of which draw heavily on New Kingdom sources. These two works differ widely in their treatment of the lettuce association:

Gauthier (1931a and b)
Gauthier published what are still regarded as the standard works on the festivals and personnel of Min, encompassing iconography, texts and archaeology.

Bleeker (1956)
Bleeker published a general in-depth study of Min, possibly influenced by a monotheistic religious attitude coupled with a reticence to discuss the sexual implications of the lettuce.

The considerable research of Gauthier culminated in two books based on his doctoral thesis, Les Fêtes du Dieu Min (1931a) and Le Personnel du Dieu Min (1931b) which complements Les Fêtes du Dieu Min. McFarlane (1995) based her authoritative re-examination of the development of the cult of Min in the Early Dynastic Period on Gauthier’s work about the personnel who served Min, but the most influential of Gauthier’s works is Les Fêtes du Dieu Min (1931a). Basically this is a study, as the title intimates, of the festivals of Min rather than a history of Min the god, but the supporting evidence included therein has made the book one of major importance in the overall study of the god. Prior to the publication of this work, Egyptologists were open to criticism for their concentration on the festivals of Osiris to the virtual exclusion of the festivals of other major and secondary
gods (Loret 1882-1884; Erman 1886: 377; Brugsch 1890; Schäfer 1904; Moret 1911, 1912; Foucart 1924: 1-4; Sethe 1928). In the introduction to Les Fêtes du Dieu Min, Gauthier (1931a) states that his study concerns one of the most curious and important, yet one of the least well-known gods in the Egyptian religion, whose festivals constitute the major part of what is known about his cult. He begins with a survey of the festivals of Min in the Egyptian calendar but the major part of the work concerns the history and events of the festival of pr.t Mnw, ‘the going forth of Min’ based on reliefs and inscriptions at the temples of Medinet Habu, the Ramesseum, Luxor and Karnak. As part of his background research, Gauthier reviews the association of Min and the lettuce in the iconography, and expresses doubt about the aphrodisiac properties of the plant.

Bleeker focuses on the relationship of Min with other deities and discusses the religious aspects and possible origins of the god, but writes relatively little about Min and the lettuce. However, he discusses in some detail the stand or garden upon which Min stood (1956: 51) and acknowledges Keimer’s (1924a and b) identification of the lettuce plant. Bleeker also suggests that the lettuce was ‘sacrificed’ to Min. The use of the verb ‘sacrifice’ as a synonym for the more usual ‘offer’ in this context is an old and rather unusual one, but is still considered correct, if outmoded, usage (Oxford English Dictionary 1989). He erroneously thought that the lettuce was the only cultivated plant to produce latex and this latex he compared with milk, an Egyptian symbol of fertility (1956: 52). Bleeker discusses the ithyphallic nature of Min and the god’s ability to create life through masturbation (1956: 48-49, 101). However, he provides little assessment of the aphrodisiac nature of the lettuce plant.

Both these studies were written more than fifty years ago and neither author could have foreseen the developments in molecular biology and genetic research that have proved so influential in tracing the history and dispersal of Lactuca species. There has been no scholarly monograph about Min since that of Bleeker (1956), with the exception of the work of McFarlane (1995) referred to earlier. Bleeker (1956) frequently cites both Les Fêtes du Dieu Min and Le Personnel du Dieu Min and, therefore, Gauthier’s publications are taken as a pivotal point in the study of Min.
1-2-2 Identification of the plant depicted with Min

Early Egyptologists were determined to identify the plant associated with Min in the iconography, but it is very difficult to reconcile plant species and their properties with the words preserved in the surviving Egyptian texts (a situation paralleled in Assyriology: see, for example, Riddle 2010: 3, 24). Often, plant identification has had to proceed on the bases of inference from the context and educated guesswork as Campbell and Campbell and David have demonstrated (2008: 217-218; 2010: 3, 20). Germer also discussed these complexities, which have generated a considerable corpus of literature in their own right (1998: 84-91).

A specific problem encountered when attempting to identify Egyptian plants in the medical literature is the practice of using encrypted names for plants in the lists of ingredients to disguise their real identities. This practice was probably an attempt by the ancient physicians to maintain their mystique and authority: it was also known in Babylonian and Assyrian medicine. Many of the words could not be understood until the translation of the Greek section of Papyrus Leiden I, 384 verso, a third century BC text which lists the encrypted and actual plant names. In this text wild lettuce (here referred to by its synonym L. scariola) is known as Titan’s blood or Titan’s semen (PGM XII.435) (Köcher 1995: 204; Dieleman 2005: 189-203; Geller 2010: 21).

Although modern scientific identifications and classifications have been made and are still evolving, competing and changing systems of taxonomy allied with personal preferences and synonyms in different languages have also added to the confusion (Ucko and Dimbleby 1969: ix-x; Harlan 1992: 103-114; De Vartavan and Amorós 1997: 8-9). It is also necessary to highlight the distinction between the taxonomist’s formal Latin based descriptions of attested evidence and those contained in syntheses compiled by non-specialists who include references to ‘suggestions’ from unverifiable sources.

The difficulties and disagreements persist. Lebeda, Doležalová and Astley (2004: 172-173) note the limited accurate plant systemics of the genus Lactuca and
recommend the development of a ‘world monograph’ of the genus to form a basis for an improved and ‘more reliable’ taxonomic system. Modern technology is also influencing the subject and, since 2001, the Angiosperm Phylogeny Group has been developing a systemics method based on molecular biological data (Stevens 2001 onwards).

De Vartavan (1999: 4-7) summarises the methods of identifying species as used by Egyptologists and botanists. He compares the ‘traditional’ method of reliance on the secondary evidence in the iconography and textual sources as used by early Egyptologists, only some of whom such as Newberry, Keimer and Schweinfurth, were scholars well-versed in botany or scientific method, with the study of the primary evidence of the sparse archaeobotanical evidence employed by trained botanists. Nevertheless, he appears to have overlooked the importance of theoretical reconstruction of the relevant histories of plant species by botanists, and latterly by plant geneticists. Helbaek (1959: 365) was one of the earliest to acknowledge the value of incorporating both primary and secondary evidence into his research and Harlan (1986a: 4-10) also combined both types of evidence in a brief investigation of lettuce in ancient Egypt, using what he termed as ‘mural chronology’ in addition to his botanical expertise.

However, the problems confronting both Egyptologists and botanists when trying to identify the lettuce are compounded by an almost complete lack of archaeobotanical evidence. Physical evidence is required in order to identify any plant and only five specimens of lettuce seed, all of indeterminate date, are still extant (Darby, Galioungui and Grivetti 1977: 679; Ladizinsky 1987: 60; Germer 1985: 185; Willerding and Wolf 1990: 266; van der Veen 2001: 183, Table 8.5; Zohary and Hopf 2001: 1-7; Nesbitt 2004: 38; Peacock and Maxfield 2007: 97; Dokki Agricultural Museum Inventory 283). The identification of the plant shown with Min and in tomb and temple depictions therefore must rest solely on the interpretation of artistic and linguistic evidence (Serpico and White 2000: 403; Murray 2000: 632).

Loret concluded that the plant was a lettuce having earlier stated it to be a pine cone (1892: 68-69; 1887: 20, no. 41). At about the same time, Schweinfurth identified the lettuce but his research notes and records remain unpublished in the
Dokki Agricultural Museum, Cairo (Harlan 1986a: 8; de Vartavan 2008: 3). The first published scientific identification of the lettuce in ancient Egypt was made by Keimer (1924a and b) and, in the absence of any robust archaeobotanical evidence to the contrary, this has continued to be the accepted identification. The longstanding theory that *L. sativa* developed directly from the wild *L. serriola* (synonym *L. scariola*) has now been disproved (De Candolle 1890; Durst 1930; Lindqvist 1960: 19-350; Kesseli, Ochoa and Michelmore 1991).

The name *L. sativa* was published by Linnaeus in 1753 but the origins and dispersal of the plant only began to be considered scientifically in the nineteenth and twentieth centuries (De Candolle 1890; Vavilov: 1951; Harlan 1992: 51-52). Tackholm (1951) cited tomb depictions as evidence for Egypt being the first place in which lettuce was cultivated but Redford and Redford (1994: 74) adopted a more cautious approach, suggesting that it appeared to be one of the first locations for cultivation and breeding for specific traits although they did not go into detail. The origins and domestication of *L. sativa* were also reviewed by de Vries (1997: 165-174) who concluded that the plant originated in the Fertile Crescent area of Mesopotamia, whence it dispersed to Egypt and became associated with Min. Unfortunately, especially in the light of the explicit nature of the depiction of the god, de Vries refers to Min as ‘she’ (1997: 168).

**1-2-3 Aphrodisiacs**

Neither Gauthier nor Bleeker discussed aphrodisiacs or their alleged effects in any detail. Discussion of these subjects by Egyptologists is still often limited to general statements (frequently unsubstantiated) in relation to Min and lettuce (see, for example, Kees 1961; 77).

Taberner (1985), a Lecturer in Pharmacology at the University of Bristol, discusses the myth, history and limited science of aphrodisiacs, principally naturally occurring ones. Of the 400 examples he lists, few had been analysed at the time of publication. Lettuce was not included in the list but may have been included under the general term ‘salad’.

In contrast, Gawin (1978: 107), a final year medical student at Stanford University, California who went on to become Professor and Director of stimulant abuse, treatment and research at Yale University, uses a different approach,
opening up the subject to include recreational drugs and stimulant abuse. He proposes that the definition of aphrodisiac should include the effects on subjective pleasure during sexual interactions and this idea was incorporated by Taberner (1985).

Modern Western medical science does not recognise the existence of aphrodisiacs because there is no pharmacological evidence for such substances (Hollister 1975: 661; MacKay 2004: 4-5, 13). However, medicine in the Arab world still utilises plant based remedies for male sexual problems and a resurgence of interest in natural aphrodisiacs and their continuing use in the Middle East in the twentieth century has prompted action to preserve and record remedies and conserve plants from the Near East (World Health Organization 2000). Whilst lettuce grows in the wild in many areas of the Arab world, it is used more frequently as a cough remedy, for respiratory diseases, and as a sedative rather than as an aphrodisiac (Said, Kashef, Mazar and Salama 1996: 215; Sayyah, Hadidi and Kamalinejad 2004; Lev and Amar 2006: 436; Al-Qu’ran 2009: 47). In either system of medicine and in the use of aphrodisiacs, the placebo effect plays a major part (Taberner 1985; Pearce 2008; Geller 2010). Both Taberner (1985) and Harlan (1986a) taking the view that people will believe whatever they want to believe.

The Egyptians knew only of naturally occurring so-called aphrodisiacs or sexual stimulants and only plant based ones are relevant to this thesis. Scientific analyses of the properties of these plants are a comparatively modern exercise begun in the twentieth century. Emboden (1978; 1979a and b; 1981; 1989) for example, researched the alleged narcotic properties in several species of water lilies (Nymphaea species), but was criticised for his flawed techniques. Harer (1985) also investigated the intoxicant alkaloids in these species. Although these plants played a significant role in Egyptian religion, the aphrodisiac potential of them in the widest sense remains unproven (Counsell 2010: 51-55).

It appears to have been Brugsch who first identified lettuce as ‘Blumenstrasse’ (bouquet) and gave the plant what Gauthier (1931a: 166) calls ‘la vague désignation’ of ‘ein Aphrodisiacum’ which was still included in Ägyptisches Handwörterbuch (Brugsch 1921: 24). As Gauthier says, the authors of the Wb. adopted the identification of L. sativa but did not completely reject or discard the
earlier ones (Fig. 1-1). The following still appear in Wb I: 176 (1971) and persist in the literature:

Fig. 1-1
The entry in Wb I (1971) for 'bw

1-3 Influence of social attitudes on the study of Min
Restrictive social and religious attitudes prevalent in Western culture prior to the 1960s have affected the study and interpretation of the explicit ithyphallic nature of the iconography of Min. Scholars have glossed over as inappropriate the study of topics of a masculine sexual nature and in Egyptology ‘...the standard view of sexuality...was constructed through a selective process of obscuring the evidence.’ (Parkinson: 2008: 115). This was done by omission, emendation or re-interpretation (Pinch 1993: 235; Parkinson 2008: 116).

Early excavators, whose prejudices affected their recording and interpretation of the evidence, are now being criticised (Montserrat 1996: 174). Petrie is accused by Hare (1999: 106) of contributing to the obstruction of the study of Min by refusing to make reference to the phallus when describing the Coptos colossi now housed in the Ashmolean Museum, Oxford. Petrie had stated ‘The left hand is in the usual attitude of Min...’ (1896: 73), assuming the scholastic reader knew that Min held his phallus with his left hand but leaving the lay reader in ignorance. Stevenson Smith also carefully omitted any reference to the sexual aspects of the Colossi (1981: 29-30). However, whilst this criticism may be justified today, it is perhaps unfair to pillory early Egyptologists for what was a prevailing and conventional attitude at the time.

Furthermore, in Petrie’s publication, the Twelfth Dynasty depiction of Min with Userten I (Senusret 1) running toward him during the heb-sed festival has the
erect phallus blanked out but in the original relief in the Petrie Museum, London the erect phallus is clearly visible (1896: pl.1X; UCL 14786). It is evident from many of the line drawings throughout Petrie’s publication that illustrations of the erect phallus have been deliberately censored (1896: pl. VI, 1:12; XXII, 3:10; XVIII, 1: 6). Earlier, Wilkinson also published depictions of Min which appear to have been edited to obscure the phallos although these may be reproductions of images that were originally altered in situ by fanatics over time (1878: I, 405; III: 24; pls. LV; LXII).

In the United Kingdom, following the passing of the Obscene Publications Act 1857, erotic images or objects were controlled and suppressed to protect those considered to be the most vulnerable members of society. The poor, the less well-educated and women were paternalistically excluded from access to anything of a controversial nature by rendering relevant texts into Latin as in Griffith’s Seth and Horus (1898) or as in Griffith and Thompson’s translation (1904) of Papyrus Leiden I, verso column XIV: ‘To make a woman amare coitum suum...’. This practice was not confined to Egyptology: the description of what happens when a queen bee leaves the hive on a mating flight was entirely couched in Latin by Langstroth (1853: 159-160).

Publishing in an expensive book form was another restrictive practice, as Gardiner did with The Contendings of Horus and Seth in 1931 (Parkinson 2003: 116-117). Works of a sexual or erotic nature, from whatever culture, were deemed unfit for the eyes of women, resulting in further restriction of their availability. The British Museum created a ‘Secretum’ to store such images away from public view (Gaimster 2000: 10-15) and at Manchester Museum a collection of penises was kept locked in a separate room away from the public (pers. comm. David 2012). These forms of censorship have not disappeared: the Papyrus Turin 55001, known as the Erotic Papyrus, was periodically removed from public display and was not published by Omlin until 1973 because of the erotic nature of part of the document.

Ever since the time of Augustine of Hippo (died AD 430), the censorship of erotica and sexual references has been practiced by the Christian Church.
(Gaimster 2000: 10-15). In the twentieth century, for example, Hare was refused permission to reproduce a sixteenth century painting depicting Christ with an erect phallus on the grounds that ‘...religious propriety’ took ‘...priority over ...intellectual inquiry...’ (1999: 292, n. 44). Such attitudes were the antithesis of those of the Egyptians who perceived sex as a natural part of everyday life but who rarely portrayed deities or humans of the elite class with erect phallosi in their formal art (Robins 1996: 34-36; Goedicke 2002: 249; Myśliwiec 2004: viii-ix). Examples of exceptions to this are the satirical erotic Papyrus 55001 in the Egyptian Museum, Turin, in which various members of society are depicted with erect phallosi in lewd attitudes and the Twenty-first Dynasty papyrus of Tameni (EA 100087/3) in which Nut is depicted arched over the aroused Geb who is attempting to impregnate her (Taylor 2010: no. 106).

Whilst formal erotic art was not common in ancient Egypt, the depiction of the ithyphallic Min, like that of the ithyphallic Osiris, was essential to the nature of the god and was not regarded as offensive (Manniche 1987: 33-4). Similarly, the use of the phallus as a determinative or as a phonogram (Gardiner signs D52, 53) in writing since the Third Dynasty was a regular occurrence (Manniche 1987: 33-34; Gardiner 1994: 456; Regulski 2010: 101).

The early Egyptologists and researchers were considered to be classicists and ‘gentlemen scholars’ and, in the social climate of their time, their assumptions and unproven claims were rarely challenged (Gaimster: 2000). To take just one example of a claim that would not be countenanced in today’s more rigorous research climate, the eminent scholar, Gardiner (1931: 22, n. i) stated without any supporting evidence that Seth and Min were addicted to lettuce because it ‘obviously’ enhanced their sexual powers. Coming, as many of these attitudes did, in the formative years of the discipline of Egyptology, they have influenced and compromised the study of Min and his iconography. Much early research is now in need of re-examination because of the changes and loosening of restrictions in social attitudes. The present research seeks to go some way towards redressing the balance of earlier attitudes by taking account of these changing social conventions which can now encompass open discussion of previously taboo subjects such as phallocentricism and masturbation when interpreting Min and his attributes (Hare
1999: 106-154; Robins 2000: 383). These changing attitudes are also reflected in
the rise of gender studies since the 1960s which have further liberated discussions
about sexuality, as in the works of Meskell (1999; 2002); Robins (2000); Meskell
and Joyce (2003).

1-4 Limitations
Whilst some regard must be given to theories about the origin of Min in so far as
they relate to the thesis topic, a detailed study of the origins of Min will not be
considered here as it does not, based on current evidence, appear to have a bearing
on the association of Min with the lettuce. Min is represented by a still
unexplained symbol which has become an ideogram denoting the name of the god
(12) (Gardiner sign R22); and also as (variant γ), but in Pyramid Text 424 it
is written as (McFarlane 1990: 69; 1995: 178; Goedicke 2002: 247-8). In
the Old Kingdom, it was written as (Gardiner R23). Gardiner sign O34 is
often substituted for R22. The Min symbol may have been borrowed from or
confused with a sign belonging to ḫḥs or ḫḥs, an earlier local god of Coptos
(Gauthier 1931b: 1-2). Detailed discussion of the origin and meaning of the
symbol is also beyond the remit of this thesis, but limited mention will be made of
it inasmuch as it pertains to this research.

Similarly, it is not proposed to detail or discuss all the known occurrences of Min
figures and symbols up to the time when the lettuce became part of the
iconography since this has already been researched in depth by McFarlane (1995).

The lettuce was not the only plant associated with Min. The blue lotus (Nymphaea
cerulea) also appears in the iconography with Min and the lettuce, as does the
dom, or doum, palm (Hyphaene thebaica (L.) Mart.) that is associated with Min
in his aspect of protector of desert travellers and regeneration in the after-life
(Wilkinson 1998: 108). The significance of these plants will be examined in the
relevant sections only in so far as they relate to this thesis.

1-5 Aims, research questions and methodology.

Substantial proof now exists that L. sativa derives from a variety of wild L.
serriola (Kesseli, Ochoa and Michelmore: 1991) but it is not yet established
which species of lettuce is depicted in the iconography (if indeed, it is a species of lettuce), or when, where or why this association with Min began. The literature review shows that little research has been undertaken to link the domestication and evolution of the morphology of the lettuce with changes in the iconography and the uses made of the plant by the Egyptians. The aphrodisiac nature of lettuce appears to be a belief unique to the ancient Egyptians and it is unclear whether this ‘belief’ was of Egyptian origin or whether it was imposed by modern interpretations.

Since the publication of the two works discussed in 1-2-1, research into the subject of Min has mainly concentrated on specific aspects: for example: Hassan (1948) studied Middle Kingdom hymns to Min, Munro (1983) researched the shrine of Min and Wilkinson (1991/2) discussed the raised arm posture of Min. Whilst the functions and aspects of Min and some of his festivals and cult have been examined in depth by scholars, there is no single work that focuses on the association of Min with the lettuce plant together with a detailed study of the iconography. In spite of the absence of a comprehensive study of Min and the lettuce, there is a wide range of evidence relevant to the subject that has accumulated since the works of Gauthier (1931) and Bleecker (1956).

This study aims to re-examine the evidence for the lettuce plant in ancient Egypt, to re-examine the association of the god Min with a plant identified as lettuce that has aphrodisiac properties and the reasons why this plant was offered as such to a god of fertility. This approach has not been used before in a single study of Min and such a study, incorporating the above aims, will constitute an original contribution to the literature.

This thesis makes use of research in botany and medical science in addition to Egyptological sources, an approach not adopted in previous works. Previous approaches either did not have access to modern scientific research or simply did not consider the use of inter-disciplinary studies to investigate this topic. Few botanists, as mentioned above, had an understanding of Egyptian gods and the language whilst Egyptologists are only now in the early stages of utilising interdisciplinary botanical expertise (Wenke 2009: 90-91).
Little use was made by earlier researchers of the depictions of lettuce to further the study of the association of Min with the plant apart from as an aid to identifying which species it might be. In 1924, Keimer published examples of lettuce types and the dates when they were commonly depicted. The type of lettuce identified and analyzed in this thesis expand upon but do not always accord with those illustrated by Keimer. An illustrated list of the numbered types and relevant periods for this new analysis is given in Appendix 1. Each lettuce plant shape has been allocated a specific number that is used henceforth to refer to that type in the text: for example LI refers to the type grown in Old and Middle Kingdom garden scenes. Where appropriate, the corresponding Keimer number is also given, and this is prefaced ‘K’.

Depictions of lettuce, of provenance known and unknown, can be found in institutions worldwide and *in situ* in Egypt. The criteria for inclusion in this study were that one or more lettuce plants should be clearly depicted either with or without representations of Min. As far as possible examples with known provenance are included to facilitate interpretation, but unprovenanced examples are also used where they illustrate specific points. As the research proceeded, it became evident that there were many such depictions, particularly on stelae, which could form a major study in their own right, and the number of examples included had to be limited. Depictions where a clear identification of lettuce could not be made for whatever reason were therefore excluded; *iwr n ʀ* stelae are included because, as funerary objects, they were likely to depict offerings for a good rebirth. The focus is on the evolution of the illustration of the lettuce plant and not on any accompanying text hence clarity of execution was an important criterion in the selection of examples. Collection of the evidence was limited by time constraints and, in a few instances, by the failure of a small number of institutions to reply to enquiries. Limited access to some examples also meant their exclusion.

It should be borne in mind that many translations and plant identifications were made before 1914 or between the two World Wars. Knowledge of the Egyptian language is still expanding, but new translations or updates of older works have not often been forthcoming, probably due to cost and time. Consequently, many
of the older works that are still used as standard texts may be in need of revision.

The period covered by the study extends from the Predynastic to the Ptolemaic Period, when Min became associated with the Greek god Pan. However, some reference had to be made to periods outside these parameters in order to include relevant palaeobotanical evidence.

The research is library and museum based, integrating data derived from the literature review with re-evaluated existing evidence. The fieldwork undertaken for this thesis was as follows:

A. *L. sativa* seeds to be grown for observation and comparison with wild lettuce and lettuce in the iconography; results to be recorded in Appendix 5.

B. A poster about this research was presented at the Bioarchaeology of Ancient Egypt Conference in Cairo in January 2013. Whilst there, a trip to Saqqara was undertaken to view and/or photograph depictions and inscriptions and a visit was made to the Dokki Agricultural Museum and research facilities in Cairo to study and photograph preserved modern Egyptian lettuce species.

C. A trip was made to Luxor in October 2013 to study and photograph relevant inscriptions and reliefs at Dendera, Edfu and Medinet Habu temples, the Ramesseum and the Karnak and Luxor complexes.

D. Visits were made to the following for research and photography:

The British Museum, London
The Petrie Museum, University College London
Ashmolean Museum, University of Oxford
Manchester Museum, University of Manchester
Birmingham Museum and Art Gallery, UK
John Rylands Library, Deansgate, Manchester

The collections of foreign museums or those in the United Kingdom that it was not possible to visit were examined via the internet.
The textual, archaeological, artistic and iconographic evidence was examined and the results were applied to a study of Min as a god of fertility.

1-6 Conventions
The following conventions are applied throughout this thesis:
a) The chronology used is that of Hornung, Krauss and Warburton (2006), in which Hendrickx (2006: 56, 92 table II, 1-7) demonstrates the inconsistencies in existing methods of relative dating of the Predynastic Period and the overlap of Naqada III and Dynasties 0-II. The chronology of Hornung et al. (2006) was the most comprehensive and up to date which was available at the time of writing.


c) Some of the problems and choices involved in rendering ancient Egyptian names into English are considered by Quirke (2015: vii). The absence of vowels increases the choices of spellings available and two hundred years of European language based writing on ancient Egypt virtually force the mixing of three options: earlier ancient Greek and Latin versions e.g. Heliopolis; to go back as far as possible to the original writings e.g. Senusret and lastly to combine ancient and medieval writings in other scripts to estimate the sounds written down.

The names of kings are, as far as possible, given as in the original writing following Hornung et al. (2006 IV, 2); names of gods and private individuals are anglicised or given in transliteration following Ranke (1935-1937).

d) The referencing of tombs at the various Saqqara sites poses a problem because there is no agreed system of numbering these tombs (Mâle 1981: xi). Accordingly, the method used in PM III²: II has been adopted here. For example, the location of the tomb of Puthshepses Impy is referenced as PM III²: II, Map LXI, plan LXIV.
e) From and including volume VIII, the referencing of PM changed and a new coding system was introduced to replace the old system of referring to pagination. This has been adopted here. A number of volumes are now digitised for which the designated reference is Top. Bib.

1-7 Content
Following the introductory chapter 1, the work is divided into a further six chapters. Chapter 2 examines the evidence for Min as god of fertility and provides a background to the overall study. Particular attention is paid to work published after the work of Gauthier (1931a and b).

Chapter 3 examines the origins and evolution of lettuce and the problems involved in identifying the plant in ancient Egyptian literature and art, using textual evidence and the iconography. The uses of the plant both in Egypt and in related cultures are compared and contrasted.

In Chapter 4, the evolution of the depiction of the lettuce in the iconography, both with and without Min, and some of the visual problems involved when identifying lettuce are explored and categorised.

In Chapter 5 considers what constitutes an ‘aphrodisiac’. ‘Aphrodisiac’ properties of the lettuce are examined, together with those of other plants believed to be ‘aphrodisiac’. The use of various parts of lettuce plants in modern ethnopharmacology treatments for male sexual dysfunctions in the Middle East is reviewed. The importance of ‘aphrodisiacs’ in the ancient Egyptian afterlife and a discussion of some of the most important plant based ones is included. A consideration of the myth of The Contendings of Horus and Seth in relation to the lettuce and aphrodisiacs concludes the chapter.

Chapter 6 discusses some of the types of offerings made to Min by the king and private individuals, together with the place and occasion of their presentation and whether they are linked to specific names of Min as listed in Appendix 2.

The work concludes in Chapter 7 with a summary of the results and conclusions, followed by the Appendices. Appendix 1 classifies and illustrates the types of lettuce in the iconography as they are referred to in this thesis; Appendix 2 lists
some of the many names and epithets of Min; in Appendix 3 the known
depictions of the $s^h\wedge ktsmt$ are listed and the known examples of $pt\ t\ Mnw$are
listed in Appendix 4. Appendix 5 records the observations and results of the
lettuce-growing experiment which was ongoing throughout the last year of
research.
CHAPTER 2
MIN GOD OF FERTILITY

2-1 Introduction
This chapter sets the background to Min in his role as a god of fertility. Min’s importance as Lord of the Eastern Desert and protector of travellers and miners was prominent at different times in Egyptian history and this aspect of the god is also discussed where relevant.

2-1-1 Names, epithets and syncretisation
As some of the many names, epithets and synchretisms of Min will be discussed in this and succeeding chapters, it is considered appropriate to elaborate briefly here upon the evolution and implications of this multiplicity of names and associations.

The nature of Egyptian gods was always complex and, just as an image can only represent one aspect of an entity, so a name can describe only one facet of a god (Hornung 1982: 89-91). Min was one of the few Egyptian gods whose iconography remained basically unchanged but over time, as with many other gods, the names and epithets accorded to Min increased in number and variety. This increase developed in parallel with the widening of the sphere of Min’s influence and the expansion of what he represented. Min’s more commonly used names and epithets are listed in Appendix 2 and this will be linked in Chapter 6 with a discussion of offerings made to some of the different aspects of Min.

There is no consensus as to whether some of the many epithets of Min are actually epithets or names; this appears to be a modern distinction which may not have concerned the ancient Egyptians overmuch. In particular, whether k3-mwt.f should be regarded as a name or an epithet now depends on whether Min is regarded as a self-created god (when it may be classed as a name) or whether as a ‘functional epithet’ it describes how Min created himself (LÄ 3, 308; Traunecker 2001: 221). It has also been suggested that, instead of the usual translation of k3-mwt.f as ‘bull of his mother’, an alternative translation of ‘bull is his (own) mother’ may be appropriate, arguing that the genitive juxtapositioning of the words is not necessarily an indication of genitive relation: equivalence can
also be indicated (Hare 1999: 148). Some epithets were not restricted to Min, they could be, and frequently were, associated with other gods. Thus, quite different gods could bear the same epithet and share the same aspects but they could differ in their overall character and nature.

Syncretism is a difficult concept to define and in attempts to conceptualise ‘opposition and mixing’ it has meant different things to different cultures at different times (Clack 2011: 226-227). In Egyptology, syncretism is a relationship between two or more gods that could be dissolved at any time (Hornung 1982: 91-99) and it has been defined thus:

‘The formula Amon-Re does not signify that Amon is subsumed in Re or Re in Amon. Nor does it establish that they are identical; Amon does not equal Re. It observes that Re is in Amon in such a way that he is not lost in Amon, but remains himself just as much as Amon does, so that both gods can again be manifest separately or in other combinations.’


There is often confusion about how the word should be used: Romansky, for example, refers to Amon ‘equating’ with Min, contrary to the definition above (2002: 219).

2-1-2 Min, Amun and k3-mwt.f
The concept of k3-mwt.f (bull of his mother) whereby the son impregnated his mother to become his own father, united the past and present in one person and provided a legitimacy and continuity, particularly to the royal succession, that was unquestionable (Jacobsohn 1939: 18-27; Traunecker 2002: 184-185). Min was considered to be not only the husband of his mother as k3-mwt.f but the spouse of all goddesses and women (Gauthier 1931: 141).

By the Eleventh Dynasty, Min was already known at Coptos as k3-mwt.f. A cult had developed here for the triad Min-Isis-Horus as a result of Min’s earlier syncretisation with the Horus ḫrs3st (Horus son of Isis), when he became Min-ḫr
and was acknowledged as the son of Isis, thereby incorporating the cult of Osiris into the theology of Min. This syncretism enabled Min to be both the consort of Isis and, as Horus, father of himself (Petrie 1896: pl. XVIII, 1: 6, 2).

A significant development with reference to Min was the syncretism of the ithyphallic Min with Amun and Amun-Re at the end of the Eleventh or beginning of the Twelfth Dynasty (Traunecker 2001: 221-222). After the gods became syncretised, Amun continued to be depicted either in his original form or as the ithyphallic Amun-Min and became the only god to share Min’s iconography (McFarlane 1990: 74). Min was later described as ‘the giver’ and Amun as ‘the receiver’ of attributes that he had ‘borrowed’ from Min (Rusch 1935: 448). This linking of gods’ names is a ‘formula’ which simply acknowledges that ‘Amun is in Min’ (Bonnet: 1939: 75). This can be further qualified as the creation of a new deity that co-exists with the earlier gods (Hornung 1982: 96-99) (see above).

The k3mwt.f name or epithet became more closely associated with both Min and Amun-Re in his ithyphallic form from the Eighteenth Dynasty onwards. At this time, the ‘oneness of god’ became a central issue in the religious thought of Egypt to which the monotheism of Amarna was not the answer. The Theban theology of Amun-Re and his prominence over all other gods developed between the time of Hatshepsut and Amenhotep II when the following relevant new aspects of Egyptian religion were developed:

- Amun as a primordial creator god
- Concept of a personal god and an ethical dimension or authority of a god
- An emphasis on the uniqueness of the god (Assmann 1995: 1-11).²

gods came to be seen as manifestations of Amun as well as independent entities, but Amun was not a new god (Allen 2005: 84). The earliest attestation of Amun addressed in his own right as a primordial god occurs in the tomb of Unas, last king of the Fifth Dynasty (PT 446c/Utterance 301§ 446-447) (PM III2, 2, 421, Pyramid Texts). Amun is not attested at Karnak until the start of the Middle Kingdom when he is mentioned on a column erected by Antef II. The inscriptions on this column are the first indication that Amun had, by this time, already become syncretised with Re, from whom he took the sun-disc which appears on his headdress (Zimmer 1987: 294-297, pl.1).

From the beginning of the Nineteenth Dynasty, the order of names changes and that of Min takes precedence. The tripartite Min-Amun k3-mwt.f starts to appear in inscriptions together with a less common Min-Amun-Re k3-mwt.f. The name of Min on its own does not appear in the records of the Festival of Min, but that of Amun-Re k3-mwt.f is used: that Min is intended is shown by the ithyphallic god in the iconography with the depiction of the characteristic attributes of Min (Gauthier 1931: 137).

There are many alternative theories about the origin of Amun and his association with Min. They were considered to be one and the same by a number of early researchers (Erman 1907: 19; Müller 1918: 21, 129, 138). An attempt was made to demonstrate that Amun came from Hermopolis but had taken his form from Min (Sethe 1929) which Wainwright thought incorrect, not the least because of the different cult centres of each god (1963b: 21). Gauthier also disagreed with Sethe about the place of Amun’s origin:

‘... Amon n’est pas autre chose dès son origine qu’un Min thébain, une réplique tardive à Thèbes du dieu de la génération...’

(Gauthier 1931: 134)

It was argued that Amun was derived from Min but that they exhibited some differences: Amun became a solar deity associated with ram-gods while Min became a fertility god associated with the white bull (Wainwright 1934: 153). At Medinet Habu there is a depiction of a seated, ram-headed mummified figure
with the sun disk between its horns; the left arm is raised and above it is the *nh3h3* flail (*Epigraphic Survey* 1964: pl. 513). Behind the figure are two lettuces and a lotus on top of a shrine. Only *k3-mwt.f* remains of the accompanying inscription so this figure could represent either Amun-Re *k3-mwt.f* or Min *k3-mwt.f*. In the context of his temples, Amun-Re can be depicted as a ram so the balance of probability is that the relief is of Amun-Re (Sadek 1987: 86).

Early followers of Min may have dispersed from Akhmim in the ninth nome to Coptos and, following the breakdown of Egyptian society, the influence of Coptos expanded into the fourth nome thus introducing Min into Thebes (Goedicke 2011: 23-29). Min may then have been ‘incorporated’ with Amun in reward for the support of Coptite nomarchs in the Theban expansion policy (Lesko 1991: 104). However the syncretism came about, during the Middle Kingdom it was both politically and religiously astute of the Thebans to raise the profile of their local god Amun and he rapidly became and remained the dominant state god of kingship, a creator god and, through his syncretism with Min, a god of fertility (Traunecker 2001: 221-222).

2-2 Depictions of Min

To re-iterate points made in 1-1, Min has been accepted in the literature as a god of fertility but his origins and the details of his association with fertility remained obscure. One important consideration may have been overlooked: the reason why Min came into being in ancient Egypt. This differs from the problem of his origin in spatial terms. The depiction of Min in two or three dimensions represents the abstract concept of fertility and conveys this idea through a minimalist evocation of the human figure, emphasising the important feature of the phallus as the significant aspect of the god. This representation became the determinative hieroglyph for Min, embodying the nature and function of the god and was a representation of the act of creation and rebirth that the ancient Egyptians would have comprehended (Hornung 1982: 107, 124-125; Cooney 2008: 1). The king was seen to be the son and living image of the creator god and was believed to act like the gods (Urk. IV, 276, 2045, 2). So, through his relationship with and offerings to Min and Amun, the king was responsible for the fertility of humanity and agriculture and, hence, the continued regeneration of
Egypt itself (Assman 2001: 116-119). Min may have originated in fertility customs linked to agriculture that were already established in Upper Egypt during Naqada II or III (McFarlane 1990: 70; 1995: 351-352). He was amongst the earliest known deities of fertility and male potency who epitomised the creative drive or process and predates Ptah, Amun and Osiris. The apparent resolution of the dating of the controversial ithyphallic, gigantic statues of Min found at Coptos to the reign of Narmer, first king of the First Dynasty, establishes the statues as the earliest attestation of Min rather than the depiction on the Second Dynasty bowl discussed below (Williams 1988: 35-47) (Fig. 2-3). The Colossi would, therefore, attest to evidence for Min pre-dating evidence for Ptah, Osiris and Amun.

The first attested depiction of Ptah is that on a First Dynasty bowl, possibly from the reign of Den, fifth king of the First Dynasty, found at Tarkhan (Petrie, Wainwright and Gardiner 1913: 12, 22, pl. iii 24t). There is no secure reference prior to the Fifth Dynasty Pyramid Texts 446c for Amun and Osiris is partially depicted first on an inscribed pyramid block dated to the reign of Djedkare-Isesi in the Fifth Dynasty (Faulkner 1969: 90; Griffiths 1980: 236-237). However, this latter identification is considered doubtful by a number of researchers (Lorton 1985: 122 n4; Eaton-Krauss 1987: 233-236; Begelsbacher-Fischer 1981: 123 n4).

Apart from discussing the inscriptions recorded by Couyat and Montet (1912) and Winkler (1938), neither Bleeker nor Gauthier made much comment about Min in the early rock art. The significance of the Eastern Desert rock art in the context of this thesis lies in the number and quality of the representations of Min with and without lettuces, ranging from the Predynastic to the Late Periods, particularly those in the Wadi Hammamat as recorded by Couyat and Montet (1912). The standard reference for rock art in the Eastern Desert is still that of Winkler (1938) but the study of the petroglyphs continues to evolve with new discoveries in the late twentieth and twenty-first centuries and is rapidly becoming a discipline in its own right (Morrow and Morrow 2002: 15). Although the texts of Couyat and Montet have been criticised for inaccuracies (Gauthier 1931: 161 n.5; Traunecker 2002: 355 n.2) their illustrations, now a hundred years old, are invaluable because, in addition to the encroachment of the desert, the
area is now being opened up to commerce and tourism and, as at so many sites, the inscriptions are suffering irreparable damage from these intrusions, looting and development (Maxfield and Peacock 1998: 183; Morrow and Morrow 2002: 13; Gates-Foster 2012: 744).

An inscription on the north face of a cliff at Wadi Abâd, further south in the Eastern Desert and reached from Edfu, depicts an ithyphallic, anthropomorphic figure without plumes brandishing an agricultural flail and standing in a boat (Fig. 2-1). This was considered to be an early depiction of Min and by comparative dating, it has been attributed to Naqada II (Weigall 1909: 156-7, pl. XXIX, 2; Wilkinson 2003: 191-192, fig. 58).

![Fig. 2-1](image)

Min figure discovered by Weigall at Wadi Abâd  
(Adapted from Weigall 1909: pl. XXIX)

However, although the flail does appear to be an agricultural, two-flapped one (see 2-5), it is not depicted above the hand of the bearer as in the earliest attested representation of Min in figure 2-3 below, but appears to be grasped by the handle. This may, therefore, illustrate a warrior or a chieftain and is possibly not an early representation of Min.

An earlier inscription, perhaps the earliest known representation of an Egyptian god and which may be another precursor of the Min figure, was discovered in a petroglyph in Wadi Umm Salam, dated to c. 4000 BC. The figure appears to be male, wears twin plumes and is leading what appears to be a cow (Wilkinson 2003: 109-111, fig. 41, 189-192) (Fig. 2-2). The basis for the identification is a combination of

- Plumes, which in later art were an attribute of Egyptian gods
- The obvious masculine nature of the figure
- The cow, as a symbol of Min’s aspect of protector of the grazing herds
Neither the Kanais figure nor the one at Wadi Umm Salam has the combination of plumes and penis or carries the flail in the same way as Min in what is still regarded in the literature as the earliest attested figure of him on a fragment of a slate bowl, discovered by Petrie in the Second Dynasty tomb of Khasekhemwy at Abydos (1902: 1:2, pl. iii, 48) (Fig. 2-3).

The next attested depiction of Min was found in the valley temple of Sneferu at Dahshur where, for the first time on current evidence, a depiction of Min was included on a royal monument although only fragments remain (PM 3117; Fakhry 1961: 107; figs. 114-116) (Fig. 2-4).
The foundation of the Min temple at Coptos may have coincided with the development of the institution of nationwide kingship and the unification of Egypt (McFarlane 1995: 352). The evidence indicates that up to and including the Eighth Dynasty, the iconography of Min was restricted to the royal domain and depictions of ceremonial occasions such as *mswt Mnw* and *pr.t Mnw* which are discussed below.

The only known figure of Min in a private tomb in the Old Kingdom dates to the Sixth Dynasty. It occurs as a determinative in the form of Gardiner sign C8 in an offering formula on a lintel discovered at the bottom of shaft B of the mastaba G 3031 of *Smr-k3* at Giza (Fisher 1924: 148, pl. 49.3). It is part of an unusual writing of *pr.t Mnw* in which there is no honorific transposition. Min and his iconography were primarily associated with the king and royal monuments and this depiction in a private tomb is exceptional (McFarlane 1995: 252). One reason for its inclusion might be that at the end of the inscription the owner of the lintel is referred to as an acquaintance of the king and this might have been a royal favour or reward. It should be noted that the lintel may belong to another official also called *Smr-k3* buried in the nearby mastaba G 3020 and the possibility of a scribal error being another plausible explanation (Fisher 1924: 97; McFarlane 1995: 252).
Apart from this example, access to the cult image of the god was chiefly restricted to the king and his priestly representatives in the temples. The people probably saw the image of the god when it was brought out of the temple during the procession of Min to the fields in pr.t Mnw, which is attested from at least the Fourth Dynasty, but which may have originated in the Predynastic Period (Gauthier 1931: 17).

Min’s close association with the kingship could have isolated him from the popular domain but evidence of votive offerings from the Middle Kingdom onwards shows an increased direct contact between private individuals and state deities.\(^3\) The unusual Twelfth or Thirteenth Dynasty private offering stela of Aku (Museo civico archeologico Bologna inv. KS 1911) (PM III: 3, 803-037-120; Bresciani 1975: 29-31), probably found at Abydos but the provenance is unconfirmed, which depicts a shrine behind Mnw-\( hr\)-\( nht\) surmounted not by a lettuce but by the small figure of a man described as:

‘...le purificateur qui pénètre (dans le temple) Antef, triomphant...’

(Gabolde 2000: 227, cat. 45).\(^4\)

A further example of the personal worship of Min may be found in the British Museum: a Nineteenth Dynasty\(^5\) stela (EA 911) found by Hay at Karnak (PM II: ii, 295; British Museum (1909: no. 932) (Fig. 2-5). This stela depicts Min-Amun-Re-\( kmw.f\) on or in front of a tree plus twelve votive ears\(^6\) which, through sympathetic magic, enabled or encouraged the god to listen to the prayers of the supplicant Pakharkhons. In front of the god is a table of offerings with a lettuce plant laid on top of the other items. This limestone stela was purchased from Hay in 1868 and has no other provenance; the surface has been repaired but enough remains to establish the name Min-Amun.\(^7\)

\(^3\) For a discussion of personal religion, personal piety and associated theories, see Luiselli (2008); Baines & Frood (2011: 3-5).

\(^4\) It was not possible to obtain a copy of this stela.

\(^5\) British Museum (1909) gives the date as Thirtieth Dynasty.

\(^6\) For a discussion of stele, votive ears and sympathetic magic see Blok (1928: 123-135).

\(^7\) Enquiries at the British Museum determined that there may be confusion in the numbering and identification of this stela which has not been resolved.
A second example, from the Late Period, is one of many votive situlae from the Sacred Animal Necropolis at Saqqara (fig. 2-6). The uses and styles of situlae changed from their introduction in the Middle Kingdom through the New Kingdom⁸ but it is their function in the Late Period that is considered here. The situlae appear to have been mass-produced for purchase by so-called ‘pilgrims’ to

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⁸ For an overview see Lichtheim (1947: 169-179); Griffiths 1975: 208-211).
temples to be dedicated as votive offerings at shrines. (Junker 1913: 10; Lichtheim 1947: 172, 178-179; Green 1987: 66).

In a study of the metal and faience situlae discovered at Saqqara, it was found that the most commonly invoked deity was Isis, who was petitioned to give life through rebirth to the deceased. In this aspect, the goddess cared for the deceased as would a mother her son (Green 1987: 66; Wilkinson 1992: 47; 2003: 147-148). Isis was often depicted carrying a situla in the Late Period and through the liquids it contained she was associated with Osiris and the Nile through water and, through milk, with her role as mother of Horus. At Coptos she was the mother of Min, who in this context was Horus (Griffiths 1975: 211).

It is unclear whether the receptacles at Saqqara or elsewhere were used for milk and/or water libations. Milk was offered to goddesses such as Isis, to feed the children and give strength and protection. It also guaranteed that the (king’s) son would succeed his father and continue the family line.

‘Ihy then presents the king the royal office that his father has given him and the milk that his mother has given him.’ (Dendera VII, 148) (Trans. Cauville 2012: 53)

The decoration of these vessels has a central adoration scene where the deceased faces a row of deities but, although Isis is the most commonly invoked, it is the ithyphallic Amun or Amun-Re who is the first deity in the line to receive offerings. The presence of ithyphallic Amun or Amun-Re and lettuce suggests regeneration. The male principle, combined with the female ability to give birth and life was a further guarantee of regeneration (fig. 2-6a and b).

![Fig. 2-6a. Cast bronze situla. H5-206 [857]; Cairo JD E 91134. (Adapted from Green 1987: 78-79)](image)
Fig. 2-6b.
Detail of the decoration on situla H5-206 above.
(Adapted from Green 1987: Fig. 109, no. 181)

Lastly, an artefact which suggests that Min was still being invoked at a personal level in the Ptolemaic Period. This artefact (figure 2-7) is described as a terracotta statuette of Amun-Min-Pan from an unknown temple in the Fayoum (EA37580) (Burn et al. 1903: Terracotta 3153; Bailey 2008: 3153EA, pl. 27; Tallet and Zivie-Coche 2012: 451). These objects were popular in the Graeco-Roman Period and are believed to have been made for private worship, as votive offerings or as funerary items. However, because most of them were discovered on the arts market or came from illicit excavations, their provenance and context are frequently difficult or impossible to determine (Sandri 2012: 644).

A comparable terracotta in Marseille, provenance unknown, depicts a similar statue being carried and is described by Maspero as Zeus-Serapis, a syncretism of Min and Serapis (1889: no. 1091) and which is possibly Harpokrates conflated with Amun-Min. The left arm is in the same position as on the London statuette, but instead of the right arm being raised as with Min, a finger is held to the mouth of the child-god (Bailey 2008: 3153EA).
Fig. 2-7
Ptolemaic terracotta figure of Amun-Min-Pan from the Fayoum.
EA 37580
© Trustees of the British Museum

Bleeker suggested that, apart from examples such as these, Min’s high status in the hierarchy of the gods could only be deduced from his attributes, an analysis of his pose and chiefly from the festivals held in his honour (1967:19). In this chapter, the depiction and interpretation of Min will be analysed from the perspective of a god of fertility, incorporating theories both supporting and opposing this interpretation that have developed since the seminal work of Gauthier (1931a and b).

During the Sixth Dynasty the iconography of Min took on its final form; the earliest extant examples of Min on a stand in front of varying numbers of lettuce plants are two commemorative stelae from Upper Egypt dated to the time of the first *sed*-festival of Pepi I. The first stela is an inscription at Wadi Hammamat (Couyat and Montet 1912: pl. XVI, 63) (Fig. 2-8a) and the second a royal decree of Pepi I from Coptos temple (Cairo 41.890) (Weill 1912: 42, pl. VII; Hayes 1946: 3-23) (Fig. 2-8b).

On both stelae, the god is shown in his familiar form but he is standing on two different platforms. The Wadi Hammamat stela depicts Min on a platform,
marked out in rectangles, representing plant beds with the lettuces apparently growing in them (figure 2-8a) but in the Coptos inscription (figure 2-8b), Min is standing on a trapezoidal object that is not marked out in rectangles. The second trapezoidal stand resembles one of the hieroglyphs in the word for the abstract concept of \( m^t \) and this resemblance and its significance have been discussed by Gauthier (1929: 41-82), Bleeker (1956: 80-2) and Allen (2001: 115-7). The ‘plant bed’ stand may symbolise the cultivated and irrigated fields where the statue was deposited as part of the festival of \( pr.t\ Mnw \) (McFarlane 1995: 247-8), but for Bleeker it indicated that Min was the god of ‘vegetation’ (1956: 51).

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**Fig. 2-8a**
Rock inscription dated to the reign of Pepi I, Wadi Hammamat. Min on a stand marked out in rectangles. (Adapted from Couyat & Montet 1912: pl. XVI, 63)

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**Fig. 2-8b**
Decree of Pepi I from Coptos depicting Min and lettuces on a stand in the shape of the hieroglyph for \( m^t \) (Top half of stela only shown here). (Adapted from Weill 1912: pl. VII)
The stand, whatever its significance, was unique to Min: the early form depicted the god standing on the plant-bed and later he is shown standing in front of it, or a stylized version of it, as on the fragments of New Kingdom votive stelae UCL 14601⁹ and UC 14571 (Fig. 2-7c) (Stewart 1976: 41, pl. 32.5, 32.6).

32.5

32.6

Fig. 2-8c

32.5 Min on his ‘pedestal’ separate from the lettuce and garden. Eighteenth –Nineteenth Dynasty votive stela of Isu (?).
32.6 Stela of an unknown Eighteenth Dynasty dedicant.
(Adapted from Stewart 1976: 41, pl. 32.5, 32.6).

There is no ‘evidence’ for the mythological genesis of Min as is found, for example, in the myth of the birth of the child Horus or of Re-Atum, apart from the festival of mswt-Mnw which is thought to be the precursor of the pr. t Mnw festival and was related to the birth of Min (Breasted 1906: I, 99, 142; Gauthier 1931: 18-20; Bleecker 1956: 101-102; Moens 1985: n.61; Hornung 1996:143). The Palermo Stone records some details of mswt Mnw being celebrated, possibly in year seven of the First Dynasty king Djet. If this entry in the Royal Annals on the Palermo Stone is authentic then it would confirm that the cult of Min was the subject of royal worship from at least the beginning of the Dynastic Period (Wilkinson 2000b: 100-101). However, reconstructions of the Palermo Stone Royal Annals do differ and they can only be considered as speculative (Hornung et al. (2006: 101).

An early form of mswt Mnw may be depicted on a label found in the tomb of Hemaka at Saqqara, dated to the reign of Djer in the First Dynasty (PM III²: II,

⁹ For which also see the clearer figure 3-15 below.
This label bears the depiction of an upright, possibly mumiform, image being carried in a procession. The mummified figure is assumed to be female as it is beardless, based on a comparison with Gardiner sign A53 which depicts a similar upright, male mummy whose gender is indicated by the presence of a beard (Emery 1938: 36). The absence of a beard on the Hemaka label figure may be an artistic omission but not all anthropomorphic signs had beards: Gardiner sign A48 does not and it could therefore represent either sex (Gardiner 1957: 447). Furthermore, at the time when Emery was writing in 1938, no evidence for mummification of this type existed for such an early date. Evidence was excavated at Hierakonpolis which demonstrates that rudimentary mummification as depicted on the label may have existed by the reign of Djer and Petrie had earlier discovered the wrapped arm and jewellery of a queen of Zer (sic) in a First Dynasty tomb at Abydos (1901: 16-17, pl. I: centre; Friedman 1997: 1-3, 8). Using modern investigative methods of chemical techniques, evidence has since been found in funerary wrappings from securely provenanced and dated mummies from Mostagedda in the Badari region in Upper Egypt which pushes back the origins of mummification by approximately 1500 years to the Badarian period (Jones, Higham et al. 2014: 1-10).

The Hemaka label has been interpreted as an early depiction of mswt Mnw because of the presence of the hieroglyph ms (birth) above the figure preceding the mummy (Moens 1985: 61). The top of this hieroglyph is apparently damaged and is not clearly legible, although Petrie accepted it as ms on other labels found at Abydos (1903 II: 20, pl. III). Further evidence supporting the sign as ms occurs in the middle register of the Hemaka label where the truncated ms sign is inscribed in green, the symbolic colour of birth and regeneration (Emery 1938: 35-37, pl. 18A, cat. 411). A comparable but much later image, which may substantiate Moens’ hypothesis, appears in the procession of Amun-Min in the Twelfth Dynasty heb-sed chapel of Senwosret I at Karnak. On the pillars in the west hall, the king supports an upright statue of the mummified, ithyphallic Amun-Min that is carried by an attendant in a similar way to that depicted on the Djer label (PM II²: 62; Lacau and Cheverier 1956: 81-84, pl. 18 scene 13, pl. 23) (Fig. 2-9).
Fig. 2-9.
Amun-Min supported by Senwosret I, *heb-sed* chapel, Karnak.
(Norris 2013)

A second statue of Min, this time held by a kneeling attendant (Lacau and Chevrier 1956: pl. 41, scene 30), could be interpreted as a depiction of a statue being placed on the lettuce garden for the king.

Nevertheless, there is still some uncertainty about the interpretation of *mst* and *mswt*. Gardiner criticised Breasted for assuming that *mst* in the Early Dynastic Period meant, in this context, ‘birth’. Gardiner argued that this was not a festival celebrating the birth of a god but it should be interpreted as ‘the creation of’ a statue of a god, in this case of Min (1945:13, n2). An alternative suggestion offers a slightly different interpretation of *mst* in a discussion about roles of the
king, one of which was to dedicate new images of the gods and to give them life through the Opening of the Mouth Ceremony’ (Wilkinson 2000: 69).

The *mswt Mnw* was replaced by *pr.t Mnw* by the end of the Third or beginning of the Fourth Dynasty and during the New Kingdom, *mswt* appears to have become interchangeable with *pr.t* meaning ‘going forth’ because the Book of the Dead Chapter 17 also refers to ‘going forth’ as the birth of Min (Speleers 1928: 37; Gauthier 1931: 20; Barguet 1967: 58; Faulkner 1972: 44; McFarlane 1995: 187). In summary, *mswt* in the early Dynastic Period related to the giving of life to an image or the making of a statue of a god, an event sufficiently important for the Egyptians to use for dating purposes whilst *pr.t* refers to a later New Kingdom festival in which the statue of a god was carried in procession (McFarlane 1995: 188).

It has been suggested that Min could be associated with a Predynastic Upper Egyptian fertility rite that possibly had connections with Punt which is assumed to be to the south of Egypt (McFarlane 1990: 70). The location of this country or region has not been positively identified\(^\text{10}\) although there is some evidence for its being in the area of Ethiopia and Eritrea, or Sudan bordering Ethiopia and as an area covering the Red Sea shores of Ethiopia and south Yemen (Hilzheimer 1932: 112-114; Herzog 1968: 29; Kitchen 1971: 184- 207; Sayed 1977: 176-177; Phillips 1997: 423-457; Balanda 2005/2006: 36-44). There is insufficient evidence to prove that Min originated in Punt or elsewhere outside Egypt but, if Min had originated outside Egypt, he had been a god of Egypt for so long that he displayed the characteristics typical of an ancient Egyptian god (Bleeker 1956: 34-36, 39). A more detailed examination of relevant evidence for the location of Punt and its connections with Egypt is outside the scope of this work but there are two pertinent references that should be considered here that relate to the origin of Min.

One of a number of references to Min and Punt is found in two songs purported to be sung by the ‘Negro of Punt’: one is recorded at the Nineteenth Dynasty

\(^{10}\) Useful reviews of the earlier evidence and opinions can be found in Phillips (1997) and Balanda (2005/2006).
mortuary temple of Ramesses III at Medinet Habu (PM II: ii, Medinet Habu second court 96-98, north and east walls, first register 3; Epigraphic Survey 1940: pls. 203, 204) and the other of which only fragments remain on the east and north walls at the Ramesseum (LD III, 164). Both are part of inscriptions relating to the pr.t Mnw celebrations and the hieroglyphic texts are printed in parallel in Gauthier (1931a: 200). The Medinet Habu version refers to Min ‘coming over the mountains’, an ancient Egyptian way of referring to a foreigner (Bleeker 1956: 34), and in this other role of desert traveller he is perceived as a protector of travellers and Lord of the Eastern Desert (Gauthier 1931a: 197-198). This appellation was revived in the Graeco-Roman Period when Min became associated with Pan and was adopted as protector of mines and desert travellers in the Eastern Desert, and rock inscriptions in the quarries at Mons Porphyrites reveal a strong adherence to this revival of Min (Aufrère 1998: 9, 12-14; Peacock 2000: 431, 437-438). The Ramesseum song refers to an all-conquering Min standing on his mountains (Epigraphic Survey 1940: pl. 203, 32; Gauthier 1931a: 190, 192, 197 (10)).

It was hypothesised that this scant evidence may relate to a cultural memory of the origin of the Egyptians being in Punt (Bleeker (1956: 36). Gauthier, on the other hand, considered Min to be an indigenous god of Egypt originating in the Arabian desert south of Coptos, who may have come from the Eastern Desert with nomadic sheep and goat herders and hence was an early deity of fertility of the herds (1931: xi, 197(10)). It is possible that there may have been a change in the perception of Min from that of a procreation god to one of crop fertility following the establishment of settled agriculture (Junker (1961: 81; McFarlane 1990: 69) but Gauthier argued that Min probably did not become a god of fertility of crops until he became associated with Osiris (1931: 238). The argument against this theory is that Osiris is not attested prior to the Fifth Dynasty (Baines 1972: 287) by which time settled agriculture was already well established in Egypt.
The significant role played by Min in the establishment of kingship\textsuperscript{11} and possibly in the unification of Egypt has been discussed by a number of researchers (Sethe 1930: 166-169; Frankfort 1948: 188-190; Baumgartel 1975: 31; McFarlane 1995: 170-173). By late Naqada III both Min and Horus were associated with local rulers in Upper Egypt but, with the establishment of the kingship, Min was subsequently replaced as chief royal god by Horus (McFarlane 1995: 172-173). The earliest evidence for Min pre-dates the establishment of the state and kingship as has been shown, but with the instigation of kingship in Egypt Min became the ‘national god of fertility’ and became an integral part of sustaining Egyptian agriculture and the kingship of Egypt through his festival of \textit{pr.t. Mnw} (McFarlane 1990: 69-70, 74; 1995: 157-173).

From the Fifth Dynasty, kings were regarded as manifestations of the solar god Re and adopted the epithet \textit{sr R} (Son of Re) which preceded the nomen. Re, like Min, was closely associated with the kingship and remained a state god, eventually becoming syncretised with Min-Amun as has been shown (Gardiner: 1994: 74, v; Quirke 2001: 17).

\section*{2-3 Portrayal of Min}

Three elements epitomise Min: the raised arm, the flail and the erect penis (Sourdive 1984: 407). This iconography hardly changed from the examples found on stone vases from the Step Pyramid at Saqqara dating to the first two dynasties until the Roman era, when Min-Pan was depicted at the Mons Porphyrites quarries in the Eastern Desert in AD 18 (Lauer and Lacau 1936-1965: V, 19; Maxfield and Peacock 1998: 185).

Min is traditionally depicted as a mummified, ithyphallic figure standing with a raised right arm held at a right angle to the body (but see also 2-5 below), with the open palm held facing forward above which is a flail. The left hand is hidden within the white mummification bandages and grasps his erect phallus. He wears a head-dress bearing two tall feathers, from the back of which dangles a ribbon

\textsuperscript{11} For a brief overview of the development of Egyptian kingship see Fairman 1958: 74-104.
that reaches to the ground. In two-dimensional representations, he is depicted from the side which serves to accentuate the erect phallus.

However, it is possible that Min was not always depicted as mummiform. A statue discovered by Reinach in the 1910-1911 season at Coptos, possibly Twenty-sixth Dynasty, purportedly depicts Min (Fig. 2-10). The figure is nude apart from a broad collar with a pectoral and bracelets on his upper left arm and wrist; the head, feet and right arm are missing (Musée des Beaux-Arts, Lyon: inv. 1970-337; Reinach 1913: 81-82, fig. 32; Coptos 2000: 81). Reinach gives no evidence to support his opinion that this represents Min.

An almost identical statue, also missing the head, feet and right arm but dated to the Saite or First Persian Occupation, had been discovered at Coptos in 1887 and, again, no evidence for the identification as Min is given (CGC 38070) (Daressy 1906: 26, pl. VI).

Although it has been accepted that Min is depicted as a mummiform figure, there is the possibility that his portrayal is a relic of pre-historic methods of depicting the human figure in three-dimensional, stone statues. Hornung (1996: 107) suggests that the mummiform portrayal of Min is a minimal interpretation of the human figure similar to this sculpture of the Early Dynastic Period. Schäfer (1974: 316-317) explained this concept as a rendering of an abstract view of the stationary human figure with the arms close to the sides of the body and the legs not separated as, for example, on the Colossi of Min found at Coptos (Petrie 1896: 7-9). In three-dimensional portrayals of Min, such as the Coptos Colossi, more detail is included: the legs are indicated by an indentation, the kneecaps are represented by triangles and the scrotum is also clearly depicted (Schäfer 1974: 317). This style, reminiscent of the depiction of stone figures continued to apply to Min until the Roman era and it is suggested that, given the dates when they were believed to have been produced, the depictions of Min in figure 2-10 and in CGC 38070 may be examples of the re-working of styles from earlier periods, so-called ‘archaising’ (Lloyd 2000: 390-391).
Fig. 2-10
Possibly a nude figure of Min
© Lyon MBA-Photo Alain Basset

The raised arm and flail of Min indicate that early statues of the god with these attributes may have been made from wood, which is a more easily manipulated material than stone, and a wooden flail may have been inserted into the hand of stone statues such as the Colossi of Min. This opens up the suggestion that some of the figures may have been re-interpreted so that they appear to be wrapped in bandages or in close fitting garments (Schäfer 1974: 17, 51, 317). A precedent for what appears to be a shrouded figure occurs in the heb-sed procession on the Narmer Macehead found in the main deposit at Hierakonpolis by Quibell and Green (1902), which is now in the Ashmolean Museum (AN 1896-1908 E. 3631). The identity of the shrouded figure which is seated in a carrying chair, is uncertain.
Relatively few gods were depicted as mummiform. Those gods who were depicted as bandaged or closely sheathed such as Min, Ptah and Osiris may have been associated with pent-up ‘vital energy’ in the process of being released: in the case of Min this would probably have meant his generative and re-generative forces (Zivie-Coche 2004: 18).

It is evident that the genesis of the ‘gods’ in ancient Egypt is a contentious issue that has not yet been resolved, but current research into the Predynastic Period and research into the development of belief in ‘gods’ is developing rapidly (Hendrickx 2011: 16), the implication being that Wilkinson’s hypothesis may yet prove tenable and Hornung be proved incorrect.

**2-4 Fertility and the significance of colour**

The word *jwn* or *jnm* (variant *iwn* or *inm*) can signify both the colour and the nature or essence of an entity (Gardiner 1957: 552; Wilkinson 1999: 104; Baines 2007: 244-245). However, the word is not attested until the Middle Kingdom (*Wb* I, 52:1). Thus some, but not all, descriptive words for colours can make a statement about the subject beyond the physical illustration created by the artist and there can also be an element of ambivalence in their meaning (Baines 2007: 246). Blue and green are two such colours: blue symbolised life, fertility and rebirth, whilst green was a significant symbol of growth and specifically re-birth (Wilkinson 1999: 107-109).

A number of other considerations must be taken into account when identifying and describing colours (Lee and Quirke 2000: 107-117; Baines 2007: 246): Over time, pigments and colourants became subjected to degradation making it difficult to identify the original colour with the naked eye; as a result, it is the writer’s experience that although a range of light and dark blues might be observed, it is not usually possible to quantify whether one colour or another originally predominated.

Different colours predominated in different dynasties.
Inevitably, there would be a variation in intensity and shade within a tomb and between tombs because batches of colour were difficult to match exactly every time.

A further complication, specific to Min, is that the face and phallus which should have provided evidence of colour have in many instances been attacked and destroyed.

A variety of processes can cause deterioration and changes in colour, particularly in greens and blues (Green 2001: 43-48; Scott 2010: 32-45). Some of the confusion about the colour of lettuce (3-3) can be attributed to the earlier lack of analytical techniques for evaluating colour degradation: black is now known to be the final result of the degradation of blue to green and a different process of degradation results in blue becoming black (Green 2001: 43-45; Scott 2010: 32-33). A further problem in the modern era is the difficulty experienced when distinguishing between blue and green in some modern print reproductions (Baines 1985: 357).

The iconography had not only a representational aspect but the symbolism of the colours employed must be taken into account when attempting an interpretation because more than one meaning can often be ascribed to the combined impact of colour and any one symbol or group of symbols (Wilkinson 1999: 7-13). The evidence from Graeco-Roman representations indicates a greater symbolic use of colour at this time than previously found (Baines 2007: 247). However, it is entirely possible that the colour symbolism employed at the end of the dynastic period was different to the colour symbolism employed at its beginning.

Min can be depicted with black skin (Gauthier 1931: 202; Bleeker 1956: 45, 49-50). This is seen in a wall painting, possibly from the Twelfth Dynasty reign of Senusret I, found at Coptos by Petrie and now in the Manchester Museum (1896: 11, pl. XI, 3) (Fig. 2-11). The black skin here may be the result of colour degradation because the majority of depictions examined by the author portray Amun-Min with blue skin of varying shades (symbolic of regeneration and rebirth). Black statues of Min may also have resulted from the application of
unguents which, as is demonstrated in 5-4-8, caused the image to blacken over time.

![Image](image.jpg)

**Fig. 2-11.**
Min depicted with black face and arm.
Manchester Museum Acc. No. 1758
(Norris 2013)
© Manchester Museum, University of Manchester

Skin colour, if interpreted literally, may also suggest a southern African origin for Min (Petrie 1908-1926: 249; Gauthier 1931: 202; Harlan 1986a: 7). At a symbolic level it might represent the fertile richness of the black Egyptian soil that was deposited by the Nile at each inundation (Kees 1943: 416). Thus, through the use of black, Min became associated with regeneration and new growth of crops (Kozloff and Bryan 1992: 142). The suggestion that statues of Min were painted black ‘... to represent stormy nights’ lacks supporting evidence (Mojsov 2005: 5).

In the Ptolemaic and into the Roman Periods Min and the colour black were associated with the phases of the moon, particularly the thirtieth day of the lunar
cycle. After this day a new moon re-appears but, because of its position nearer to the sun than the earth, the new moon seems to be invisible at this date. Min was believed to replace the moon at this juncture and it is Min who lights the first day of the new cycle (Esna IV, I, n. 399C). If two new moons occurred in the same civil calendar month the second one was referred to as a black moon in reference to Min as god of regeneration (Cauville 2011b: 43).

Finally, the perception of colour in relation to the development of language on which much of the above rests, must be considered. Berlin and Kay (1969; 1991) developed an ‘encoding sequence’ for the development of the perception of colour through language. It was proposed that:

‘…there exist universally for humans eleven basic perceptual color categories, which serve as the psychophysical referents of the eleven or fewer basic color terms in any language’ (Berlin & Kay 1969: 104).

This hypothesis still stands, but some modification has been made to the original encoding sequence which maps the progressive naming of potential colour categories in a set of seven phases (Kay 1975: 260-261; Kay and McDaniel 1978: 639, fig. 13) (Fig. 2-12).

![Diagram of colour sequence]

**Fig. 2-12. Revised colour coding sequence (Adapted from Turton 1980: 331, fig. 2).**

In this scheme, in the third phase of language development, the term ‘GRUE’ appears.\textsuperscript{12} This term had been introduced earlier by Schenkel (1963: 131-147). Unlike Berlin and Kay, Schenkel’s hypothesis was based on ‘warm’ and ‘cool’ focal colours rather than red, green and blue, hypothesising that the Egyptians had four basic colour terms: black $km(m)$; white $hf$; red $dšr$ and $wšf$ or

\textsuperscript{12}The ancient Egyptian language is not unique in only possessing one word for blue and green: in modern Welsh ‘glas’ can signify green or blue and context is essential to decipher the exact intention (Author’s observation 2014).
green/blue, known as ‘grue’ (Schenkel 1963: 131-147; Baines 2007: 242). Here, the Egyptian perception of colour focused on a spectrum of greens which also encompassed blues and did not relate to one solid colour or the other. Other Egyptian words relating to blue such as ḫsdj (a prestigious word used to describe lapis lazuli) and ḫrtjw were secondary but grue was the most important (Baines 2007: 242; Snape 2014: pers. comm.).

Egyptian painting was essentially polychrome i.e. colour was used in solid areas and rarely in textures and patterns; shading and perspective were unusual. Reproducing the colour of the subject at any one given moment was not the purpose:

‘Each colour indicates in schematic fashion that the class of object shown is ‘red’, ‘green’ and so forth’ (Baines 2007: 245).

This schematic rendering of colour is echoed in the representation of objects and scenes where the intention is to depict a category or type and the essence or nature of the subject and only secondarily, and rarely, an exact replica i.e. the black, green or blue skin of Min relates not to his physical colour but to the nature of the god as symbolic of birth and rebirth (Baines 2007: 245-246).

Egyptian terminology for colours is limited given the extensive use of colour in sculpture, reliefs and painting. Painting had reached Stage V by the Old Kingdom in the colour coding sequence in figure 2-11 and Stage VII in the New Kingdom but the words to describe them did not keep pace, remaining at Stage IIIa. The reasons for and the chronological details of these developments are explored further by Turton and Baines (1980: 320-338; 2007: 253-262). Colour in relation to the depiction of lettuce is examined in 3-6.

2-5 Flail and raised arms

Min is one of three gods of reproduction or fertility associated with what is referred to either as a flail, a conventionalised whip or a fly flap or fly whisk (Mace and Winlock 1926: 94). Osiris is depicted carrying his flail by the handle whilst Min and Min-Amun ḫ3-mwt.f are both depicted with the flail balanced
above a raised hand although they are usually described as ‘holding’ the flail (Sourdive 1984: 172) (fig. 2-13).

Fig. 2-13.
Flail and raised arm of Min.
Lines on the palm of the hand indicate that it faces forwards.
Chapel of Senusret 1, Karnak
(Norris 2013)

Two basic types of flail have been identified:

- the flagellum or *nhḥ3 flail, associated with power and the kingship
- a fly whisk, owned by private individuals.
Gauthier described the flail as ‘un fouet’ or ‘un bâton à triple lanière’ whilst Gardiner called it a flagellum\(^1\) as does Regulski (1931: 187.16; 1994: 510.S45; 2010: 95). The flagellum appears to be a stylised, ceremonial adaptation of much earlier types whose meaning had been lost apart from one version consisting of three fox skins tied together at the neck, from which is derived the hieroglyph for ‘birth’ (Gardiner sign F31) (Mace and Winlock 1916: 94-102; Bleeker 1956: 46-47). Bleeker suggested that these stylised fox tails and their connotations with birth and fertility were symbolic of Min’s procreative nature and were not intended to represent a weapon or war-like nature.

Indeed, although in many countries the flail was used as a military weapon, there is no evidence that it was used as such in Egypt. The flail and crook carried by the king were symbols of office and formed a link between the kingship and the agriculture which made Egypt prosper. The original flail, which was also associated with Osiris, god of vegetation, probably represented a primitive agricultural version made of several ropes, cords or leather strips, each cord being strung with perforated pebbles, beads or hollow bones as can be seen in figure 2-13 (Hornblower 1941: 101). An agricultural flail would certainly fit best with Min’s association with plant and crop fertility.

The flail may be a symbol of reproduction but, because it is not held and is depicted above the hand, controversially it may also represent a form of punctuation that is now referred to as the diacritical mark circumflex, which indicates that a word has been contracted (Sourdive 1984: 409; COED 2011: 260). At face value, this appears a plausible explanation but it is not tenable because diacritical marks do not appear to have existed in the Egyptian language as it is currently comprehended.

2-6 Raised arm and open palm
The gesture discussed here is an apotropaic one, used in standing figures where the arm is raised and drawn back to at least shoulder level, with the hand open. It can also be made into a fist but this does not apply to depictions of Min. It differs

\(^1\)Whip or scourge. Possibly from the Latin flagrum: ‘scourge’ (COED 2011).
from the gesture of handing something to someone, brandishing or the holding of a weapon or a gesture of greeting or other emotion (Wilkinson 1991/2: 110 n 6). Many Near Eastern figures of this type are depicted with emphasised genitalia or are ithyphallic and the combination of raised arm and genitalia relates to protection and power (Wilkinson 1991/2:110-113.

Which arm is raised (in two dimensional figures) depends upon which way the god is portrayed: if facing right, as are the majority, his right hand is raised. In depictions of the god facing left, it is the left hand that is raised, as for example in the lunette of the Twentieth Dynasty granite stela of Quban in Grenoble Museum (inv. MG 1937, MG 1969, MG 3565) (PM VII, 83; Prisse d’Avennes 1847: pl. XXI; Tresson 1922: pl. II; Kitchen 1976: 353-360; Kueny and Yoyotte 1979: 37-42; Kitchen 1982: 49-50; Gabolde 2000: 153, 232) (Fig. 2-14). This stela, now in three fragments, was found by Prisse d’Avennes in 1842 at the southern temple of the Nubian fortress of Quban, which controlled access to the gold mines of Wadi Alaqi. It is dated by the inscriptions to year three of Ramesses II. The inscription records how Min accorded a great favour to Ramesses II and granted that the king should have wells dug along the route from the mines to provide water for prospectors and caravans bringing gold to Egypt, a feat that Seti I had been unable to accomplish (Kitchen 1976: 353-360; Kueny and Yoyotte 1979: 41). This protection of the desert traveller accords with Ogdon’s theory examined below and with Wilkinson’s suggestions which are also discussed below.

Fig. 2-14.
Lunette of the Stela of Quban (MG 1937)
© Musée de Grenoble.

Goedicke argues against Ogdon and Wilkinson. He thinks that an apparent misinterpretation made by Gardiner of Davies’s copy of the Inscription is being perpetuated here (1946: 47 n. 7, pl. VI; Urk IV, 56, 8-10). Goedicke’s point is that Gardiner mis-interpreted Qe-šwty, ‘the One with High Plumes’ or ‘high of Plumes’, as referring to Min, instead of Amun-Min with whom the description is also associated. Goedicke notes that the details in the inscription concerned ‘...the intended construction of the doors...’ and that it was inappropriate to have an image of Min on these doors when the sanctuary was dedicated to Thoth and also because Amun featured so prominently in the accession of Hatshepsut to the throne (Goedicke 2004: 67, 68). On the basis of Goedicke’s suggestion, it would appear that both Ogdon and Wilkinson may have erroneously followed the work of Gardiner when interpreting the significance of the door decoration. Wilkinson does add to Ogdon’s theory the point that the raised arm of Min illustrates the power of protection through a gesture rather than by brandishing a weapon and Ogdon emphasises that the flail is not held but is independent above the hand of Min, symbolising power (Ogdon 1985/6: 31)

The traditional pose of Min, which Bleeker (1956: 16) argued had been acquired from Horus hr nḥt, the Horus of war, is associated solely with ‘...male fertility power...’ but Ogdon questions why the god was always depicted with a raised arm and whether this could be connected with the fertility aspect of Min (1985/6: 29). He suggests that the raised open hand combined with the ithyphallic nature of the god was a gesture of protection through intimidation and aggression arising from Min’s original role as the protector of caravans travelling from the
gold mines and the Red Sea to Coptos, a proposal that had already been made by Wilkinson almost a century earlier (Ogdon 1985/6: 36; Wilkinson 1878: III, 22).

Alternatively, Min may originally have been a guardian of the crops whose ithyphallic statue was placed in the fields to protect against evil and eventually, by association, the statue came to symbolise the fertility of the land that Min protected. In a similar manner, phallic mud statues were still being placed in fields to protect crops at Khargeh Oasis in the early twentieth century (Hornblower 1927: 152-3, fig. I; 1946: 19). This interpretation of Min as a guardian or protector appears relevant to the claim that Min is to be associated more with husbandry than fertility (Goedicke 2002: 247).

The apotropaic function of guardianship suggested by Ogdon gave Wilkinson cause to re-examine some of the theories concerning the Min symbol, the many forms of which have not been fully or satisfactorily explained. Wainwright’s theory (1931: 185-95) that the symbol is a lightning bolt has now been rejected because the bolt is based on Classical models which are on the whole much later than the representations of the Min emblem (Wilkinson 1991/92: 109; McFarlane 1990: 75 n.1).

On the other hand, Bleeker (1931: 44) argued that the emblem could not resemble lightening or a thunderbolt because Upper Egypt, the centre of the Min cult, has so little rain that thunder storms would be extremely rare for anyone to observe the phenomena and create the emblem but this argument was based on his own observations of the weather in twentieth century Upper Egypt. Evidence from the Valley of the Kings indicates that flash flooding often occurred in ancient Egypt, as Weeks discovered when excavating KV5 (2006: 167, 182, 186-187, 190). A suggestion that the symbol of Min represented a lightning bolt in which he revealed himself to mortals in storms does not appear tenable (it appears to be heavily influenced by Greek mythology) and no supporting evidence is offered (Mojsov 2005: 5).

The crux of Wilkinson’s argument is that the Sixth Dynasty variant of the Min symbol is the final form which ‘could’ represent a door or locking bolt, which is
an Egyptian symbol of defence. The door bolt is also associated with the phallus in the Pyramid Texts which Wilkinson proposes is a fitting symbol for an ithyphallic, apotropaic guardian deity (Faulkner 1969: PT 313, Spell 502; 1991/92: 113-115, pl. 3).

The raised arm was characteristic of sky-gods throughout the ancient Near East, and if a god possessed a weapon such as a thunder or lightning bolt it is argued that he must raise his arm to throw it (Wainwright 1931: 194-195). However, the hand of Min is depicted as open and does not appear to be holding anything. This open hand ‘...radiates the power of the god indicated by the floating flail.’ (Shoemaker 2001: 9) but this theory is not developed further.

The $k3$ as a creative force may have some validity here. The $k3$ is a complex concept and can best be described as the non-physical aspect of a person or its character that is given substance when portrayed as a statue with the $k3$ sign (Gardiner sign D28) on its head. Atum, the creator god, implanted the $k3$ in the gods and the king by embracing them, which explains the shape of the sign as two outstretched arms of the symbol. It has been suggested that, because the hand of the raised arm statuettes does not grasp the flagellum, the raised arm itself may constitute half of a pair of outstretched arms and this raised arm could then be construed as a symbol of sexuality and the creative force as in PT Utterance 600:

‘...you spat out Shu, you expectorated Tefenet, and you set your arms about them as the arms of a ka-symbol that your essence might be in them. O Atum, set your arms about the King, about this construction, and about this pyramid as the arms of a ka-symbol, that the King’s essence may be in it, enduring for ever...’

The $k3$ was connected with the passing of male potency from father to son at the moment of conception and represented a link between generations and it is here that an association with Min and rebirth may be perceived (Taylor 2001:18-19).

2-7 Late Period fecundity figures
The Late Period gave rise to a corpus of raised arm and flail carrying statuettes cast in bronze and precious metals, whose iconography assimilated fecundity
figures to major gods, chiefly to Amun in his aspect of Amun-Re (Baines 1985: 259-260). They were derived from royal sculpture to emphasise the kingly aspect of the iconography of Amun and were inscribed on the plinths with fecundity figures combined with smt-bw symbols. This combination was developed to convey a formal, compact and illusory reference to the role of the king in maintaining the produce of Egypt for the benefits of the gods but is, as yet, not fully understood (Baines 1985: 266-272; 353-356).

Bleeker erroneously described one such Twenty-sixth Dynasty statuette as Min when, in fact, it is Amun-Re k3-mwt.f according to the hieroglyphic inscription on the plinth (Fig. 2-15). The statuette was offered by ṭj-hrw-p(3)-hpš, Chamberlain of the divine adoratress ʿnḥ- (n.) s-nfr-ḥb-r to the ithyphallic Amun-Re k3-mwt.f. Round the plinth are depictions of the fecundity god ḫḥ who personified the inundation and whose association with Amun in this context may signify that the ‘inundation is in Amun’ (Baines 1985: 79-80). The figure was probably found at Thebes and is now in the British Museum (EA 60042) (PM VIII: II 802-002-610; Leclant 1961: 1, fas. iv 89-90, figs. 9, 10; Baines 1985: 268, figs. 157-161).  

Bleeker claimed that this statuette was unique because only the flaps of the flail are held downward in Min’s hand (1956: 46). The statuette was examined by the author in May 2013. It is bronze with gold inlay and the head-dress plumes are missing. The hand cannot be grasping a handle because the palm is held open facing forward. There is a pin inserted through the hand into the flail which has limited sideways movement on this pivot and another transverse pin prevents the pivot from falling out. The flail handle may have broken off and the pins are possibly a method to retain the remnants of the flail with the statuette. It is also suggested that this method of depicting the flail, whether the handle is retained or not, was a simple way to represent in three dimensions the two-dimensional concept of the flail floating over the raised hand. This conclusion concurs with that put forward by Sourdive (1984: 406).

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14 For a detailed discussion of the decoration on the plinth of this statuette see Baines (1985: 266-268).
Fig. 2-15.
Bronze statuette of Amun-Re $k3$-mwt.$f$
The palm clearly faces forwards and is not holding the flail.
BM 60042
© Trustees of the British Museum

2-7-1 $Mnw$ [sm$J$]$\ hrwj. \ w. \ f$(Min who massacres his enemies)
As a result of prosopographical research in the Papyri Joseph Smith I, IV, X and XI, new light was shed on a little known aspect of Min known as Min-who-massacres-his-enemies, his prophets and on a group of related statuettes. The papyri were dated, at the latest, to the first half of the second century BC (Coenen 1998: 1103-1115).
This unusual aspect of Min is attested on the first register of both sides of the doorway of the Bab el-Abd, the pro-pylon of the northern section of the Ptolemaic temple of Montu at Karnak. Here, in a list of gods who favour Ptolemy III Euergetes I, Min is referred to as “Min who massacres his enemies, Reshef who dwells in the house of Montu” and is depicted as Min in the pose of Reshef on one side of the gateway and as ithyphallic Min on the other (Urk. VIII, 31b; Coenen 1998: 1112-1113).\(^{15}\) It is probable that ‘Min who massacres his enemies’ (or Min slayer of his enemies) was syncretised with Reshef (Reshef) during the first half of the Ptolemaic Period but, due to the number of different combinations of gods involved, an exact identification is not considered possible (Coenen 1998: 1112-1113).

The only known statue of ‘Min who massacres his enemies’ is the bronze figure CGC 38836 (Daressy 1906: 208, pl. XLI) (Fig. 216a).\(^{16}\) The statue has been dated to the Twenty-sixth Dynasty and is the earliest attestation of this aspect of Min which is a rare title not recorded by Gauthier (de Meulenaere 1949: 15; Coenen 1998: 1112 n. 30, 114). Daressy erroneously identified the statue from the hieroglyphic text on the front of the pedestal as $Mnw\text{-}hr\text{-}n\text{ht}$ (Min Horus victorious) instead of $Mnw\text{-}sm\text{b}\text{-}hrw\text{j}\text{-}w.f$ and this error has been perpetuated e.g. Cornelius (1994: 129, n.38). $Mnw\text{-}hr\text{-}n\text{ht}$ is shown as a club-brandishing warrior with the facial features of Bes. The Cairo statue was dedicated by $\beta\text{-}hrw$, daughter of the Head of door-openers of the temple of Amun $\text{Ir}\text{-}\tau\text{-}n\text{-}\text{hnsw}$ (?) and $\text{bst}\text{-}(m\text{-})\text{-}\text{h}\text{-}bjt$ (CGC 38836, JE 27043; Daressy 1906: 208, pl.XLI; Wainwright 1934:152-153, fig. 9; 1935: 152-153, fig. 9; PM 802-028-500). This and the statuettes in figures 2-17b and 2-17c/d further illustrate Min’s association with Western Asiatic deities and his syncretism with Amun and other Egyptian deities.

There is a parallel figure in Liverpool Museum (M11594) (figure 2-16b) described in the catalogue of 1852 as ‘…the Egyptian Hercules…’ and in 1879 as a ‘Rare syncretic figure identified as Amun-Re, c. 100 B.C.’ This is described as having the head and mane of a lion but which appears to be a representation of the head of Bes (Gatty 1879: 4, 61-62; pl. XIVb; Bienkowski and Tooley 1995: 78.

\(^{15}\) In PM II, ii: p. 3, 8d referred to only as ‘Min as Reshef’.
\(^{16}\) Also known from Middle Kingdom stelae eg BM EA 506 (Franke 2013: 169-173).
62, pl. 93). Figure 2-16c and d depicts another parallel bronze statue of Amen-Ra (sic) with a Bes-like head, also wearing a *mu* head-dress and the right hand missing. It bears no inscription. It was found in 1900 at Thebes and was formerly in the collection of Hilton Price, and is now in the British Museum (BM EA65518) (Hilton Price 1901: 35-36, pl. 1). Wainwright was partially correct when he identified these three statuettes as Min or Min-Amun, claiming they illustrate an unusual and violent aspect of Min dating from the late New Kingdom or later (1934: 152). He describes them as resembling Bes or Reshep, the Syro-Palestinian warrior god who was introduced into Egypt in the Eighteenth Dynasty along with the influx of Syro-Asian workers at that time (Giveon 1980: 144). The resemblance lies in the crown and raised arm posture brandishing a club. On two of the images (Figs. 2-16a; 2-16c and d), the left hand is extended forward as if holding something, possibly the head of a victim and these characteristics combined with the weapon brandishing bring to mind the smiting scenes of warrior kings.

![Fig. 2-16a](image1.png)

*Mnw-ḥr-nḥt* (CGC 38836)
(Daressy 1906: pl. XLIII)

![Fig. 2-16b](image2.png)

Amun-Re (M11594)
(Gatty 1879: pl. XIVb)
Fig. 2-16c

*Mnw [smt] hrwj. w. f*

Collection of Hilton Price, 1901

*Proceedings of the Society for Biblical Archaeology* 1901, pl. II)

Fig 2-16d

*Mnw [smt] hrwj. w. f*

As it is in the British Museum, 2014.

BM EA 65518

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The figures 2-16a, b and c do not resemble the Reshep depicted with Min and Qudshu on stela BM EA191 (figure 2-21). There are three other statues of this type, bearing no inscriptions:

- EA30737
- A gold encrusted statuette, Doetsch Collection, Rautenstrauch-Joest Museum, Cologne

All of the statuettes in this section syncretised the fertility and apotropaic aspects of Min with the apotropaic aspects of Bes who was not only a protector of childbirth and of the family but a bringer of good luck and prosperity, and with Reshep’s aspect of a god of the deserts. There are also a number of similar bronze figures identified by texts on the socles as variations of Amun, Min-Horus and Harpokrates (Coenen 1998: 1114).

2-7-2 Statuettes of uncertain identification

The bronze statuette CGC 38544 has been identified as Anubis bearing a flail in the style of Min (Daressy 1905: 244, pl. XXXI). Anubis is often confused with the jackal god Wepwawet, known as ‘Opener of the Ways’, and who, like Min, was associated with the kingship from at least early in the Pharaonic period. The original image is of poor quality (figure 2-17), but the flap of the ‘flail’ does not resemble that of Min and it could represent an adze, another agricultural implement which was used to break up the soil so that plants could generate more easily. A form of adze was used by Wepwawet in the Opening of the Mouth ceremony to give breath and life to the deceased king, thereby opening the way to his rebirth (PT Utterance 21; Assmann 2005: 227-228). Furthermore, the statuette has something depicted on its left shoulder that might be interpreted as a jackal’s mane of long hair that grows along the dorsal line from the head to the tail and, significantly, across the shoulders (Osborn and Osbornová 1998: 55). It is suggested, therefore, that CGC 38544 is Wepwawet and not Anubis.
In a similar vein, a seated ithyphallic bronze statuette with the head of a ram and the pose of Min, (in as much as the right arm supports a flail and the head dress of Ammon (sic)), is included in a list of figures attributed to ‘Harsiesi (Panthée)’ (CGC 38852). Inexplicably, the figure is said to have the body of a bird attached to its shoulders, the tail of which touches the ground, but this cannot be seen in the published illustration (figure 2-18) (Daressy 1905: 212, pl. XLIII). The child-god Harsiese, ‘Horus son of Isis’, who is associated with royal conception and birth, can also be depicted seated and carrying a flail. The combination of pose, head, flail and head dress suggest that this statuette could be a variant image of Min, syncretised with Amun.

One other statuette (figure 2-19) deserves mention here as its identification is also questionable. It is said to be the creator god Ptah, possibly of the Saite or Persian Periods (CGC 38476) (Daressy 1906: 127, pl. XXVII) but the flail is held in the manner of Min and not of Ptah who grasps the handle of his flail. The
head-dress has no feathers or ornamentation but resembles the close-fitting cap such as that worn by Ptah, which may account for the identification as Ptah. However, when figure 2-19 is compared with figure 2-20 from the Red Chapel in the Open Air Museum at Karnak, where Hatshepsut is depicted libating and offering to an ithyphallic Amun-Re, the gods are wearing similar headdresses. CGC 38476 therefore is more likely to be Amun-Re and not Ptah.

Fig. 2-19
Min-Amun identified as Ptah
CGC 38476
(Daressy 1906: pl. XXVII)

Fig 2-20 (digitally enhanced)
Ithyphallic Amun-Re wearing a Ptah-type head dress
Block 259, North sanctuary, row 3, Red Chapel of Hatshepsut, Karnak
(Taylor 2013)
2-8 Min in triads with western Asiatic deities

In the Middle and New Kingdoms, Egypt experienced influxes of western Asiatic migrants, merchants and military personnel who brought with them foreign deities, some of whom became assimilated into the Egyptian religion and were associated with Min. These Asiatic deities shared with Min the aspects of a warlike nature, fertility and an affinity with foreign lands. They, conversely, also possessed powers of protection against or removal of the afflictions that they caused and could be petitioned for help (Sadek 1987: 155; Shoemaker 2001: 5).

Four deities in particular are associated with Min and fertility. The Syro-Palestinian god of war and thunder, Reshep, was introduced in the Eighteenth Dynasty. He was perceived as a god of death, destruction and pestilence and was linked with Seth (sexual practices), Montu (war) and desert places (Min). He was depicted in an anthropomorphic form with an Asiatic-style beard, wearing a short kilt and the white crown of Egypt which sometimes sported a streamer and the head of a gazelle in place of the uraeus to symbolise the desert origin of the god and/or his association with Seth. Reshep carried either a spear, mace, axe, sickle or sword in his right hand and a shield, was sceptre or an ankh in the left (Fig. 2-21). He first appeared in Egypt as a royal god of Amenhotep II and subsequently became a popular god who could be petitioned for help (‘a hearing god’) (Giveon 1980: 144; Schulman 1985: 89-106; Shoemaker 2001: 1-10; Wilkinson 2003: 126-127). Reshep frequently appeared in a triads with Qudshu and Min, chiefly on Nineteenth Dynasty stelae from Deir el-Medineh; something which Te Velde referred to as a ‘triad of sexuality’ related to openly flouted extra-marital relations that he considered prevalent during the Ramesside period (Te Velde 1971: 84).

It was only in Egypt that the Canaanite ‘goddess’ Qadesh (or Qedeshet) was known as Qudshu; elsewhere in Asia she appears to have been a concept rather than a specific goddess.\(^{17}\) She was depicted, unusually in Egyptian iconography, in full-frontal nudity standing on a lion, holding a lotus in her right hand with

\(^{17}\) For a detailed discussion of various interpretations and identifications with other goddesses see Cornelius (2004: 94-101).
snakes in her left: both are symbols of eroticism, fertility and rebirth although Shoemaker refers to ‘lilies’ rather than ‘lotus’ (Shoemaker 2001: 6) (Fig. 2-21). Qudshu could be invoked for her healing, protection, power over nature and fertility. She was linked to the aggressive and destructive aspects of Hathor, Sekhmet, Astarte and Anat and bore the epithet ‘Eye of Re’ in which role she was mistress of foreign lands (Shoemaker 2001: 7-8; Cornelius 2004: 97).

Assimilated into Egyptian religion in the Eighteenth Dynasty, her non-royal cult is attested in temples at Memphis. She appears with Reshep and Min in eight triads, sometimes under the variant name of Kent, as in figure 2-21 (BM EA191) (Kitchen 1980: 603; Schulman 1982: 81; Shoemaker 2001: 1).

**Fig. 2-21.**
Nineteenth Dynasty Stela of Qeh, probably from Deir el-Medineh.
Upper register: Min, Qudshu and Reshep
Lower register: the offerant’s son Any, his wife Tuy, Qeh, the goddess Anat.
BM EA191
© Trustees of the British Museum

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Two other Asiatic fertility goddesses, recognised in Egypt, could be associated with Min in triads. The Ugarit warrior Anat, the patron goddess of Ramesses II and protectress of Ramesses III in battle, in her aspect of Daughter of Re was equated with Hathor and her sexual nature was linked with Min. Like Anat, the Mesopotamian warrior goddess Astarte protected the king’s chariot in battle. She was depicted naked, wearing the *atef* crown, either riding a horse or in a chariot (Brunner-Traut 1956: 29-30, pl. vii number 16; Schulman 1957: 267-270; Andreu-Lanöe 2013: cat. no. 93).

Reshep and the goddesses Qudshu (Qadesh), Astarte and Anat (Anath) appear on votive stelae in triads with Min, many of which originated from Deir el-Medineh. All these deities are linked by their association with foreign countries outside Egypt and their apotropaic powers over fertility and death. It has been suggested that, whilst Min represents Egypt and the vital life forces of fertility and virility, Reshep stands for Western Asia, disease, death and destruction. These opposing forces are combined in Qudshu. She is an Egyptian goddess but of foreign extraction, and combines a warlike nature with mastery over birth and rebirth. Her power over the two male gods on these triad stelae is demonstrated by her full frontal depiction with the gods facing her. Her dominion over nature is shown by her stance on a lion and the lotus and snakes she proffers to the male deities (Shoemaker 2001: 5, 10-11).

The stela of Ramose is one example of a petition to the Qudshu triad for a cure for sterility (Turin Stela 50066, previously 1601) (PM² 1:2 p.733; Kitchen 1980: 621; Cornelius 2004: Cat. 5.3, pl. 5.3; Exell 2006a: 206). Ramose was a Senior Scribe associated with the temple of Hathor at Deir el-Medineh during the reign of Ramesses II. He dedicated this stela to Qudshu in the hope that she and Min, who represented male fertility, would intercede to cure his impotence (Fig. 2-22). He and his wife Mutemwia, who unusually for a female is also depicted, eventually failed to produce any heirs. Mutemwia, a Servant of Taweret, is also depicted with Ramose on another stela donated by him, this time to the female goddess of fertility, Taweret (Tartu Museum 71, Estonia) (Turaiev 1899: 161, pl. ix). Mutemwia is not depicted on any of the other nineteen stelae dedicated by
Ramose and her inclusion on petitions to fertility deities for a cure for childlessness may indicate the intention of such stelae (Kitchen 1980: 621; Exell 2006: 206-207).

Women appear to have dedicated a wide range of votive offerings to Hathor and it is possible that this was the preferred method for them rather than invocation via stelae. Additionally, the cult of Hathor at Deir el-Medineh was a state cult and, therefore, not accessible for private invocations for fertility and sterility, but it is known that Ramose dedicated a large limestone phallus to Hathor, the purpose of which is uncertain (Cairo TN29/4/26/3) (Exell 2006a: 206-207).

An unusual triad stela (figure 2-23) depicts Reshep (Reshpu), Qadesh (Qudshu) and the Syrian god Min-Tamuz (Glyptothèque Ny Carlsberg Copenhagen Cat.)

Fig. 2-22
Turin stela 50066
Min, Qudshu and Reshep, upper register.
Ramose and his wife, Mutemwia, below
© Museo Egizio di Torino
1908 E 536, AEIN 313) (Koefoed-Petersen 1948: 49). Like Min, Tamuz represents the vital generative force in plants and animals and, like Min \textit{k3-mwt.f}, he was the husband of a goddess, Tiamat (Ishtar), and was also her son (Frankfort 1948: 285). The stela, dedicated to Qadesh, probably of the Nineteenth or Twentieth Dynasty, was purchased in Egypt around 1890 but nothing is known of its provenance or who owned it (Koefoed-Petersen 1948: 49). It has been suggested that the figure on the left where Min might be expected is Baal and the identity of the figure on the right where Resheph might be expected is now also in doubt (Cornelius 1994: 155-157; 2004: 49).

A list of other stelae, with references, which depict Min with western Asiatic deities can be found in Appendix 5.

**2-9 Ritual of \textit{s'h\textasciicircum k3 shnt}**

Min was also known as the Lord of the \textit{shn.t}, a name that applied to both a pole and a ceremony or ritual based around this pole. The ceremony involved the erection of a central pole and a number of men who appear to climb a set of four poles leaning against this main pole. Records of the \textit{shn.t} ceremony are depicted at a number of temples, not only at Thebes, and a full list with references can be found in Appendix 4. The earliest depiction of the ceremony is attested on the east wall of the corridor in the Sixth Dynasty funerary temple of Pepi II and is the only one to survive from that period (Jéquier 1938 II: pl.12). The earliest record
of the foundation ceremony of the *shn.t* pole can be found on pillars two and seven of the chapel of Senusret I at Karnak (Lacau 1953:14-15). A comprehensive explanation of the full ceremony has not yet been formulated because only the most significant scene, a single episode of the proceedings, was depicted and the extant depictions have suffered damage and degradation. The Egyptians recorded only one episode of the ceremony, reduced to the essential details, to avoid mis-interpretation and left the remainder unexplained, possibly because it would have been something understood by the viewer and therefore needing no clarification (Lacau 1953: 13) or because it was regarded as sacred and therefore could not be recorded.

The relief in the chapel of Senusret I of the foundation ceremony for erecting the pole is divided into seven registers and the *shn.t* occurs in the sixth one (Fig. 2-24). The foundation ceremony includes libations by the king who is pouring a liquid from two red pots into the foundation-hole where the ‘mast’ is inserted (Kitchen 1999: 213). The scene has also been interpreted as a unique depiction of the king holding two pots upside down to indicate that the libation he has offered is complete (Ertman 2012: 53, 54, 58).

![Fig. 2-24. Raising the *shhn.t* Chapel of Senusret I, Karnak. (Adapted from Lacau & Chevrier 1956: pl. 31, scene 8)](image-url)
Jéquier (1938: 17-19, pl.12) believed that this was not a competition to see who could be first to climb to the top of the central pole as was later suggested (Bleeker 1956: 53). Bleeker also saw the event as non-Egyptian and one that originated to the south of Egypt in prehistoric times which represented the premise that divine life endures by fighting and victories. He relates the \textit{shn.t} ceremony to later competitions staged in honour of Perseus, the Greek form of Horus, at Akhmim as described by Herodotus (II, 91 n.53). Bleeker asserted that because these games were held at a centre associated with Min they must therefore be a version of the \textit{shn.t} ceremony (Bleeker 1956: 54). Here he refers to the \textit{Bwth} hieroglyph and suggests that it relates to the authority or power of the presiding officials, in which case he theorises that the ceremony is based on the principle of \textit{do ut des}, the giving or making of an offering in the form of an effort to please the authorities in the expectation of something in return.

Badawy (1959: 163-179) concluded that Min was not an indigenous god and must, therefore, have brought with him different attributes from those of an Egyptian god. His theory, summarised, was that the \textit{shn.t} ceremony symbolised some of the cosmic aspects of Min as a god of fertility. The eight men clinging to the poles represented the winds and the central pole a pillar supporting the sky; the poles representing the winds were swung to and fro by men pulling on ropes. Men can be seen clinging to the poles in the depiction of the ceremony at Karnak (Fig. 2-25).

The number of climbers involved varied from four to ten. In two depictions of the ceremony at Edfu in the reign of Ptolemy IV Philopator, the men on the two inner-most poles are clinging on head downwards and the men on the outer two are head uppermost. Eight men represented the duplication of the cardinal points of the compass, depicted by the four poles, and the number eight also related to the four male and four female gods who assisted Thoth the Creator in the Hermopolitan theology (Badawy 1958: 168-171). The men on the swinging poles wore feathers in their hair which Badawy (1958: 169) said identified them as Nubians but, according to Bleeker (1956: 53), they were Libyan, from Punt or cave dwellers from the eastern mountains. In the Temple of Hathor at Dendera,
an inscription from the time of Augustus says the climbers are called ‘these great ones of the foreign lands’ (Dendara XII/I, 158-159; Feder 2013: 61, 64-65; Minas-Nerpel and De Meyer 2013: 152 n. 14; PM VI, 75, (226) top register). If Min did come from Punt, it could be assumed that the men might also have come from there, but this link is far from proven.

Fig. 2-25

Climbers are visible (left) and men possibly pulling on ropes as described by Badawy can be distinguished on the right. Festival Temple of Tuthmosis III (Akhmenu), Karnak. (PM: II2 Plan XI, room XLII (455)).
(Norris 2013)

Wainwright (1935: 164-170) examined the connection between the pole and the bull. At Edfu there is a unique text in which the words ki šn. t are replaced by a depiction of the poles (Edfou II, 56). This he takes to mean either the setting up of the ‘pole of the bull’ or the ‘setting up of the bull, the šhn.t pole’, preferring the latter interpretation (1935: 164). Having demonstrated that gods were often manifested in poles, he says that Min was also manifest or present in the bull so the one equated with the other.
A further radical suggestion is that the *shn* was a gnomon for measuring the meridian shadow. Observations of the shadow over a long period enabled the Egyptians to calculate the specific length of shadow that would coincide with the start of the inundation. The festival of Min was held before the Nile rose and the gnomon or *shn* was erected at this time to watch for the appropriate shadow. The release of four birds, which was an integral part of the Festival, was not the announcement of a king being crowned but the declaration of the coming of the Nile flood that was so important to Egyptian agriculture. This re-interpretation does emphasise the agricultural aspect of Min and his cult (Isler 1991:161-166).

Isler also suggests that the *shn* hut or shrine may have been a precursor of the pole and later the *shn* and they represent two early forms of the gnomon, the third being the pole with horn that stood outside the hut. He goes on to suggest that the prehistoric Min symbols surmounted by arrows represent the mast and struts of the gnomon and an axis that possibly indicates the meridian. The symbol of Min thus linked him to the inundation and the function of the gnomon, indicating direction, related to Min’s aspect of protector of travellers and desert dwellers (1991: 183-185).

The following texts at Dendera suggest a part of the proceedings which do not seem to have attracted much comment.

*One erects a wall to see him; one adorns a mast to catch sight of his image*

*(Dendara IX, 82)*

*We grab hold of the rope to strengthen the pole; we hold the wall steady to stabilize the hut of Min*

*(Dendara XII, 158) (Trans. Cauville 2012: 191)*

Whilst the ‘adorning’ of the mast and the use of ropes has been commented upon, the mention of a wall and its use with the hut of Min appears to be unique (Badawy 1958: 168-171). These may allude to the erection of a tent (*imw*) that accompanied Min wherever he went and in which the statue of the god resided,
as hinted at in the title of the second festival of Min as listed in the Cairo Calendar (Table 2-1 below) (Bakir 1966: 76, Recto XXVIII n. 5). A further entry in the Calendar for the seventh day of the fourth month of Proyet also refers to Min going forth into the tent and the gods celebrating (Bakir 1966: 91).

Lacau interpreted the ceremony as the erection of a woven desert tent frame which brought together the ancient desert origins and Egyptian aspects of Min (1953: 21-22). This would accord with the recording in the Cairo Calendar (CGC 86637) of a festival on day 6 of the third month of Akhet:

(The going forth) of Min into the tent, l.p.h. in festivity.’ (Bakir 1966: 38)

The TriState ceremony is now regarded as the foundation of a pavilion or tent for Min (Kitchen 1999: 213).

2-10 TriState or TriState

The name of the shrine as TriState is first attested in writing in the Middle Kingdom (Jéquier 1936-1940: 17-18). The similarity between the words TriState the ceremony, and TriState the conical edifice often depicted behind Min, has caused confusion and both structures can be seen side by side in figure 2-26.

![Image of the structure]

**Fig. 2-26.**
Left, Min and the TriState Right, the king facing the TriState (Norris 2013)
Gauthier and Badawy have both suggested explanations that are appropriate to this thesis. Gauthier reviewed the interpretations available to him and concluded that the $s_hn.t$ structure represented another form of the $s_hn$ which evoked the original sanctuary of Min in his foreign country in prehistoric times. This original sanctuary was a chapel of the bull, an animal sacred to Min and a symbol of fertility, which Badawy thought explained the two horns that surmounted the pole outside the chapel $s_hn$ in the Twelfth Dynasty. Badawy considered this to be a different pole to the $s_hn.t$ (1931: 147-150; 1948: 159-160). He perceived Min as a fertility god of great antiquity and considered the $s_hn$ and the $s_hn.t$ to be Min’s ‘...most striking...’ attributes (1958:163). He says that, because of its tall, narrow structure, the $s_hn$ could not be a hut or chapel but symbolised an erect phallus in much the same style as fertility shrines in the Indus civilisation c. 2500 BC. The similarity between the two names may have been another Egyptian pun where $s_hn$ appears to mean ‘erect phallus’ and was interchangeable with $s_hn.t$ (1958: 172-173). In view of the fact that Badawy says there are only two instances of this pun, but gives no reference, there is always the possibility that the change may have been a scribal error. Cauville, on the other hand, appears to be alone in her interpretation of the $s_hn$ as a grain silo (2012: 191).

Min is not usually associated with death and the afterlife but an unusual occurrence of the $s_hn$ in a funerary context was recently published by Olette-Pelletier (2013: 91-98, Fig. 1). The Twenty-first Dynasty sarcophagus of Isetemkhab, discovered in the royal cachette at Deir el-Bahri bears on the outside right surface a depiction of the $s_hn$ of Min with Sokar instead of the $s_yt$ chapel more usually portrayed with that god (Daressy 1909: numbers 61001-61044, 163, pl. LII; Olette-Pelletier 2013: 91-93). Sokar was a falcon-headed funerary god of Memphis who guarded the entrance to the Underworld from the necropolis. Every four years a statue of the god, enclosed in a barque, was taken in procession to the fields to aid the king in a ritual of ditch digging and opening water channels which irrigated the land and brought about the regeneration of the crops ($LÄ$ V: 1055-1074). This was a comparable ritual to that of $p_r.t$ $Mnw$. Olette-Pelletier suggests that the association of Min’s chapel with Sokar
represents the principle of the regeneration of the life forces passing to the
deceased which lends a new funerary aspect to the shn.

2-11 Festival of Min known as pr.t Mnw (going forth of Min)
The festival of pr.t Mnw was the most important of the festivals dedicated to Min
that were celebrated throughout Egypt each year from at least the third millenium
BC (Gauthier 1931: 15) (Table 2-1).

<table>
<thead>
<tr>
<th>Festival</th>
<th>Day</th>
<th>Month</th>
<th>Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Going forth of Min from Coptos</td>
<td>26</td>
<td>2</td>
<td>Proyet (Peret)</td>
</tr>
<tr>
<td>Going forth of Min into the tent</td>
<td>7</td>
<td>4</td>
<td>Proyet (Peret)</td>
</tr>
<tr>
<td>Min at Akhmim</td>
<td>5</td>
<td>4</td>
<td>Shomu (Shemu)</td>
</tr>
<tr>
<td>Festival of Min (pr.t Mnw)</td>
<td>28</td>
<td>4</td>
<td>Shomu (Shemu)</td>
</tr>
</tbody>
</table>

Table 2-1
Festivals of Min as recorded in the Cairo Calendar, Papyrus 86637.
(After Bakir 1966)

Possibly in its earliest forms a celebration of harvest, the festival was also linked
to the renewal of the royal power and fertility. Held at the beginning of the
harvest month of Pakhons, it was almost unique amongst such processions in that
the cult statue of Min was probably carried in procession fully exposed to view
and not permanently hidden within a portable shrine like other gods (Epigraphic
Survey 1940: pl. 202; Stadler 2008: 3; PM 2² p. 499 (96-98)). Not all the episodes
were recorded at every site, possibly for lack of space and relative importance of
the scene (Zivie-Coche 2004: 94), and many are now damaged or destroyed but
the fullest record of the procession of Min and the accompanying rites is that
depicted at Medinet Habu. The list of episodes below is compiled from known
examples at all the sites depicting the procession and is based on that of the
Epigraphic Survey (1940: vii) and extant depictions of pr.t Mnw and their
locations are listed in Appendix 4.
1 The king leaves his palace.
2 Arriving at the shrine of Min, the king makes an offering to Min
3 The statue of Min is taken from the shrine and then is carried in procession
4 Four birds are let loose to the four quarters of the earth
5 The king ceremonially cuts a sheaf of grain
6 The king offers to Min who has been replaced in his shrine

The festival recorded at Medinet Habu was copied from that at the Ramesseum of Ramesses II, the accompanying texts are frequently corrupt and exhibit signs of careless copying and some sections are either obscure or untranslatable (Epigraphic Survey 1940: vii).

Gauthier made a detailed study of pr.t Mnw so that will not be replicated here, but an examination of the relevance of temple gardens is appropriate as it relates to Part 3 of the festival where Min is taken in procession to the ḫtjw. Temple gardens provided daily offerings of food for the gods and ancestors which were passed on as food for the temple personnel. Larger temples, such as the mortuary temple of Ramesses III at Medinet Habu, cultivated fields outside the temenos to grow the prodigious amounts of fruit and vegetables required for the daily rituals. These products could be purchased as offerings to the gods and were a source of income for the temples (Koemoth: 1994: 41). Accounts of the vast numbers of donations offered to various temples by Ramesses III are listed in the first three sections of Payprus Harris (EA 9999/2) (Grandet 1994).

Due to the dearth of evidence for temple gardens specifically in relation to lettuce cultivation, much of the extant evidence relates to the Eighteenth Dynasty onward. Lettuce does not leave any archaeobotanical trace as is noted in 3-4, but evidence for gardens confined to lettuce plants is found at the temple of Hathepsut at Deir el-Bahri (PM II 365, 132; Naville 1906: V, pl. CXLII). Here the lettuce garden is depicted in the traditional form of land divided into squares in a symmetrical pattern of rows and plots (see 3-6-1). It is these garden plots that are depicted as stands for Min and his lettuces and which re-appear in the Nineteenth Dynasty in a stylised form on portable altars, the ‘reposoirs’ of
Gauthier, as depicted at Medinet Habu, and which became further stylized into representations of a naos (Gauthier 1929: 41-82; 1931: 168-171).

2-12 Goedicke’s circumcision theory
Goedicke considers that Min differs from the rest of the Egyptian gods because of his ‘erotic’ appearance which gave rise to the identification of the god as one of fertility, but in the context of ‘erotic’ gods no mention is made of Osiris. He argues that Min is more to be associated with husbandry rather than fertility and that none of the attributes or features of Min represent fertility and reproduction. He ascribes the assumption that Min was a god of fertility of the fields to the agricultural basis of the Egyptian civilisation but, he maintains, there is no evidence in historical times to link Min with agriculture in any respect (2002: 248-249). He refers to Junker’s theory (1961: 81-83) that Min was originally a god of the procreation of animal herds and not human fertility and that Min came from the east as a god of nomads, which he believes would explain Min’s later aspect of guardian of the desert roads.

Goedicke does not believe that the ithyphallic pose of Min can indicate fertility because fertility is judged by results not by ‘potential’ and, following the theory of Helck (1971: 282), believes that fertility can only be depicted as a pregnant female. However, the issue here is that the iconography of Min appears to be the illustration of an abstract idea of fertility as conceived by the Egyptians, not as seen by modern Europeans. The Egyptians held the male responsible for fertility and creation and it was also he who was responsible for sterility, unlike later cultures (Roth: 2000: 190).

Goedicke proposes that Min and his emblem have no connection with the concept of fertility but are associated with circumcision and the entry of male children into the adult world of fighting men. He maintains that the ithyphallic pose of Min relates to the act of circumcision, a rite performed on young men entering adulthood, and that the sign of Min represents the tool used to perform the operation (2002: 249-255; 2011: 23-25). He speculates that prt Mnw, in his words: ‘...coming forth (as) Min (man)...’ might once have been a celebration of a man’s circumcision along the same lines as bar mitzvah but does admit that this
is pure guesswork (2002: 255). Podzorski (1990: 85-86) also suggests that circumcision may be evidence for a rite of passage into manhood and here she may be following Goedicke.

Goedicke goes on to emphasise Min’s aspect of Lord of the Eastern Desert. This he maintains contradicts any fertility connotations, presumably because of the aridity of the area, but suggests that it could be connected with the entry of foreign mercenaries into Egypt via the Eastern Desert. He offers as evidence the Nineteenth Dynasty inscriptions of Merenptah’s Libyan wars, where foreign mercenaries are referred to as circumcised (Kitchen 1982: IV, 8). However, this period is many centuries later than Naqada III when Min is purported to have arrived in Egypt.

Goedicke assumes that mercenaries in Naqada III were circumcised but there does not appear to be any robust evidence in the literature for circumcised mercenaries in this period. Two circumcised male corpses (N7023; N7180) and one other (N7585) that may have been circumcised were found in the Predynastic cemetery N7000 at Naga-ed-Dêr (Lythgoe 1965), but there was no evidence to suggest that these were fighting men. The site was dated to Naqada I and II by Friedman (1981), using a comparison with the Stufe I-IIId dating system (Kaiser 1956: 109).

Goedicke’s theory appears to be predicated on the premise that Min was circumcised and there has been considerable discussion about this. At the beginning of the twentieth century, Naville was prominent amongst a group of Egyptologists who argued against the existence of circumcision in ancient Egypt (1909: 253). De Wit (1972: 43) stated much later that Min was ‘...toujours circoncis’ and provided a corpus of evidence both pictorial and textual for the operation in ancient Egypt. The sweeping statement that ‘... all male mummies from earliest times afford evidence of the custom...’ (Smith and Dawson 1924: 93) is clearly fallacious, if only in the light of the evidence at cemetery N7000 at Nag-ed-Dêr above.
The practice arose very early in Egyptian society and may have been associated with Re (Knight 2001: 336). In the New Kingdom Book of the Dead, Chapter 17 the self-circumcision of Re is described:

‘...It means the blood which fell from the phallus of Re when he took to cutting himself.’ (Trans. Faulkner 1972: 45).

The earliest surviving attestation of the operation was first depicted in the Sixth Dynasty tomb of Ankhmahor at Saqqara (Badawy 1978: 11-54, figs. 16-60, pl. 19-90; Bailey 1996: 15-28; Kanawati and Hassan 1997: pl. 55(b); Spigelman 1997: 91-100). A mass circumcision is described on a First Intermediate Period stela from the Girga district of Naga-ed-Der (Oriental Institute University of Chicago 16956) in which 120 men were operated upon, although the translation is qualified by the observation that this may be a figurative reference to coming of age (Dunham 1937: 103-104). A further account of a circumcision is given at the Nineteenth Dynasty Mut temple of Ramesses II at Karnak (Pillet 1954: pl. V, B). A remedy for stopping bleeding post-circumcision is given in Papyrus Ebers LXXXII, which can be dated to the reign of Amenhotep I.

Even though Min appears to be circumcised, and the damaged and degraded state of many two- and three-dimensional representations prevents a complete analysis, the connection between Min and the circumcision of fighting men as made by Goedicke still appears tenuous.

Lastly, Goedicke sees in the ceremony of climbing the shn.ta a further link with military activities, claiming that this is an exercise in scaling scaffolding in readiness for assaults on walled settlements. However, the poles of the shn.ta are angled very steeply for such an activity, the poles appear to be grouped round a central pillar and no wall is depicted with the structure, making it unlikely that the scenario described by Goedicke is represented here.

Goedicke does not appear to consider any possible connection between lettuce, Min and fertility when he rejects Min as a god of fertility. Nevertheless, if Min was associated with circumcision and rites of passage into manhood, it would
seem logical that a greater reaction and response to Goedicke’s theory would have occurred in the literature, but this does not appear to have happened.

2-13 Summary

This chapter has covered linguistics, rituals, the development of iconography relating to Min and interpretations of these subjects. The evidence confirms Min as a god of fertility and emphasises the complexity of the nature of this god. Material published before and after Gauthier’s seminal work has been used to support the argument that Min was a god of fertility. Not all types of offering to Min or who made them are discussed here and some of those not included are examined in Chapter 6.

The dissenting voice against Min as a god of fertility is that of Goedicke, who has put forward a novel and unique alternative hypothesis that the appearance of Min represents a rite of passage to manhood. He suggests that none of Min’s attributes, symbol or features suggests a connection with fertility, but he takes no account of the lettuce plant or what it may imply and because of this his theory must remain an interesting hypothesis that requires further investigation.
CHAPTER 3

LETTUCE: ORIGINS, HISTORY AND USES

3-1 Introduction

*Lactuca sativa* is a member of the *Compositae* family (synonym: *Asteraceae*) (International Code of Botanical Nomenclature 2006), the largest family of flowering plants of which only two have become major food crops: the sunflower (*Helianthus annuus*) for its seed and the lettuce (*L. sativa*) for its leaves and oil-producing seeds (Kesseli and Michelmore 1996: 179; Dempewolf, Reiseberg and Cronk 2008: 1141). *L. sativa* exhibits significant degrees of domestication and has become genetically dependent on humans for its continued survival. Conversely, the dandelion (*Taraxacum officinale*), chicory (*Cichorium intybus*) and endive (*C. endiva*), also edible members of the *Compositae* family, remain independent of humans for survival (Harlan 1992: 63-64; Dempewolf *et al.* 2008: 1141-1157).

The modern firm-headed, short stemmed lettuces popular today bear little resemblance to the tall, erect, wild forms of the vegetable that grow wild (Whitaker 1969: 261; Harlan 1986a: 7) and this is evident when figures 3-1 and 3-2 are compared.

![Commercially grown modern *L. sativa*, purchased 15 April 2015](Norris 2015)
The early cultivated lettuce in ancient Egypt was of type L1, a morphology portrayed in Old Kingdom Dynasty tomb reliefs such as those of Niankhkhnum.
and Khnumhotep in the reign of Neuserre (Ini) (Moussa and Altenmüller 1977: Abb. 8; PM III$^2$: ii, 641-644, Map LXII. Plan LXVI) and Mereruka in the reign of Teti (Duell 1938: pl. 21; PM III$^2$: ii, 525-534; Map LII, Plan LVI) (Figs. 3-3 and 3-4).

**Fig. 3-3**
Lettuce cultivation depicted in the tomb of Niankhkhnum
(Adapted from Moussa and Altenmüller 1977: Abb. 8)

**Fig. 3-4**
Watering lettuce, Sixth Dynasty tomb of Mereruka I
(Adapted from Duell 1938: pl. 21)

This morphology persisted into the Medieval Period and beyond in Europe and it was not until the sixteenth century that firm-headed lettuces were bred (R.H.S. 1992: 53), although it has been suggested that a cabbage variety existed in
Mesopotamia in the eighth century BC (Thompson 1924: 87; 125; 1949: 65, 72-74).

Fig. 3-5
Medieval European lettuces, lanceolate leaves, growing from a flat rosette.
(Adapted from Arano 1976: pl. XVIII; Arano catalogue 181-2)

Fig. 3-6
*Lactuca sativa* var. *longifolia* Lam.
(Keimer 1924a: 1)

A comparison of the wild lettuce found by Keimer growing in the Botanical Garden at Berlin-Dahlem in 1919 (fig. 3-6) with figures 3-3, 3-4 and 3-5 above demonstrates how little the basic morphology of long, lanceolate, pointed leaves
changed in the intervening centuries (Keimer 1924a: 1, Abb. 1). Nevertheless, the lettuce has demonstrated an almost unique ability to produce a wide variety in the size, shape, colour and texture of its lanceolate leaves and the arrangement of leaves on the stem. In a self-fertilising species such as lettuce this variety is genetically unexpected, but mutation and recombination of genes to produce this morphological diversity is a tendency which has been exploited by plant breeders, both ancient and modern, to produce a wide range of variation (Lindqvist 1960: 322-328; Whitaker 1969: 261-262; Ryder and Whitaker 1995: 54; Simpson and Ogorzaly 2001: 171-172). A marked change in morphological variety can be detected between the size and leaf shape of lettuce plants in Old Kingdom depictions and those of later periods as Keimer observed (Fig. 3-7).

![Lettuce morphology, Old Kingdom to the Ptolemaic Period.](image)

**Fig 3-7**

Lettuce morphology, Old Kingdom to the Ptolemaic Period.

*(Adapted from Keimer 1924a: 79-80, 167)*

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18 Key to Keimer’s assignment of types to periods 1 Middle Kingdom; 2- 4 Old Kingdom; 5 New Kingdom; 6-10 Middle Kingdom; 11 & 24 Twenty-first Dynasty; 12-14 New Kingdom; 15, 20 & 22 Twenty-first –Twenty-second Dynasty; 16 Late Period; 17, 18 & 23 Twentieth –Twenty-first Dynasty; 19 New Kingdom; 25 Middle Kingdom; 26 Nineteenth Dynasty; 27 End of Middle Kingdom; 28 Nineteenth Dynasty; 28a Eighteenth Dynasty.
3-2 Identification of the plant in ancient Egypt
Correct identification of the lettuce depicted is important because some species may be toxic at different stages of their growth or, in the case of L. sativa, they may produce different amounts of latex with differing compositions at various stages of growth and these factors may affect the efficacy of any aphrodisiac potential.

3-2-1 Linguistic identification

<table>
<thead>
<tr>
<th>Transliteration</th>
<th>Hieroglyph</th>
<th>Possible plant identification</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḫw</td>
<td>𓅜𓊫𓎣</td>
<td>L. sativa</td>
</tr>
<tr>
<td>ḫ, ḫ, ḫt</td>
<td>𓅜𓊫𓎥</td>
<td>L. virosa</td>
</tr>
<tr>
<td>ḫ, ḫ, ḫt</td>
<td>𓅜𓊫𓎥</td>
<td>Melilotus officinalis</td>
</tr>
<tr>
<td>ib, ibw</td>
<td>𓅜𓊫𓎦</td>
<td>Unidentified plant</td>
</tr>
</tbody>
</table>

Table 3-1
Plants referred to in the text

It was not until 1929, shortly after Keimer associated the ancient Egyptian plant in the iconography with L. sativa, that Sethe (Wb I, 176: 10-14), abandoned the identification of the plant as a tree in favour of the lettuce and Keimer’s identification is now widely accepted.

The word ḫw refers to L. sativa although this is not incontrovertibly proven (Wb I, 176: 10-14; Manniche 1989: 112; Wilson 1997: 147). The word ḫ (also written ḫt) (Wb1, 182) might be L. virosa L. but it was suggested much earlier that ḫ is Melilotus officinalis (Dawson 1934: 41; Aufrère 1986: 6; Manniche 1989: 112). Some of the earlier interpretations of plants made by Dawson have been reviewed and the conclusion reached that his identification of ḫ as M. officinalis was basically correct, although it was suggested that another Melilotus species might be more appropriate (Campbell, Saeed and David 2010: 30-5). It has also been suggested that ḫw could refer to weeds (Keimer 1924a:126).

Initially it was thought, by a comparison with the Coptic pi-ob, that ibw referred to lettuce (Loret 1892: 69) but Keimer (1924a: 126) disagreed and the identification of ibw remains uncertain. It is known that bread was made from
ibw (Wb. I: 62 (4); Wb. Dr. 21) but if ibw was lettuce, using it for bread making would be contra-indicated. Ibw was used medicinally but it does not appear in the medical papyri (Manniche 1989: 113).

It is noted that in the New Kingdom and Late Period, the king had the title ibw when making a plant offering to Hathor, particularly one consisting of garlands containing ib-leaves of an unidentified plant or tree. The protective nature and the smell of ib-leaves is emphasised in the texts and in return for such garlands, Hathor protects the king (Wilson 1997: 59).

3-2-2 Visual identification

Egyptologists’ interest in what is now generally accepted as the lettuce plant began during the nineteenth century and the earliest recorded opinion is that of Rosellini (1832: I, 42) who believed the plant was a radish, a palm heart or a palm leaf. The identification of ‘palm’ recurred again in 1940 when a Late Period statue of a Roman judge was described as holding ‘une palme’ which closely resembles a lettuce (Grdseloff 1940: 186, pl. xxix) but the reasons why a Roman legal functionary should hold a lettuce leaf, if that is what was represented, was not considered. This topic will be returned to in chapter 6.

The plant was considered to be an artichoke, which is also a member of the Compositae family, although the possibility that L. sativa also grew in Egypt and might be an alternative identification also arose (Unger 1859: 84, 112-3, pls. 3, 36, 37). Like Unger, Woenig (1886: 201 fig. 101, 207 fig. 105, 210 fig. 106) identified the plant as an artichoke or possibly beet. Woenig’s illustrations of ‘artichokes’ (figs. 3-8, 3-9a and 3-9b) are remarkably similar to some of those later used by Keimer (1924a: 167, 1-7) to support his own identification of the plant as L. sativa L. var. longifolia. Woenig’s depiction in figure 3-8, top row, second from the right, appears to be a representation of a bunch of onions or leeks.

The plants indicated by arrows in figures 3-9a and 3-9b are not artichokes but lettuce types L4a and b, identified by Keimer as shapes 2-4 (1924a:167).
Fig. 3-8
Forms of artichoke from various dynasties.
(Woenig 1886: 210, fig. 106)

Fig. 3-9a          Fig. 3-9b
Woenig’s ‘artichokes’ identified by arrows.
Fifth Dynasty, Tomb 17, Saqqara.
(Woenig 1886: 201, 207)

Schweinfurth studied the botany of Egypt but he did not publish his evidence for identification of the plant as a lettuce (Harlan 1986a: 8; de Vartavan 2008: 3). His notes and drawings are held in the Dokki Museum, Cairo, and his findings were later reported by Keimer (1924a: 77). Daressy (1900: 26-7, fig.2) and Bissing (1905: 41, pl. XXVI) also agreed that Schweinfurth was correct in his identification of the lettuce but it is Keimer’s work that has entered the literature as the accepted version.
Loret concluded that the plant was a type of lettuce, having initially claimed it was a pine cone (1887: 20, no. 41) and then publishing a revised opinion in the second edition of his ‘Flore Pharaonique’ (1892: 68-9). The initial identification of a pine cone may have arisen from Classical studies, which were popular in western culture in the nineteenth century and early twentieth century, where cones were associated with the mystery cults of Dionysus and Attis and a late version of the Osiris myth relates how the body of Osiris was found in the trunk of a conifer at Byblos (Plutarch Moralia: 5, 15, Herrmann 2014: 112, fig. 7).

The depicted plant has also been identified as several varieties of tree, possibly because the determinative for tree (Gardiner sign M1) was misconstrued as lettuce as in nhwt(trees). Based on this premise, the plant has been identified as a sycomore (Rochemontex 1886: 193), a persea (Gayet 1894: 42, 50, 73, 85) and a fig (St. Clair 898: 412) whilst Daressy concluded it was an acacia (1912: 181-2). Wilkinson referred to the plants carried in the pr.t Mnw ceremony as ‘trees’, having earlier described three other examples as ‘different bouquets.’ (1841: Second series II, 367; 1878: I, 405).

Possibly influenced by Petrie, who collaborated with him on the book, Caulfeild offered an interesting alternative based on his interpretation of three depictions in the chapel of Amun at Abydos (fig. 3-10).

‘The objects upon the stands are pretty certainly the spathes of the inflorescence of the palm; and this being a plant of which the fertilisation was always artificially performed, its flowers were a fit emblem of Min the god of fertility.’ (Caulfeild 1902: 17).

Petrie described the plants as ‘...three trees growing up from an irrigated plot...’ (1896: 10) (Fig. 3-11). Following Petrie, Müller referred to the plants depicted behind Min on his stand as ‘a grove...of tall trees...’, and as ‘Min before his grove’ (1906: 35; 1918: 138-9, fig. 137).
The three depictions of Caulfeild’s ‘palm spathes’, subsequently identified as lettuce plants. Chapel of Amun, Abydos. (Adapted from Caulfeild 1902: 17)

Relief dated to the reign of Antef V from Koptos. Three ‘trees’ growing behind Min. Adapted from Petrie (1896: 10, pl. vi, 6)

3-3 Significance of colour in lettuce depictions
As the symbolism of colour is important in depictions of Min so it is when interpreting the colour of the lettuce. Ancient Egyptian lettuces are depicted either
green, blue or yellow and it is opposite here to discuss the colour variation in these depictions as they too, have caused confusion.

The various colours used to depict lettuce have not received much attention. This may be because Egyptologists understand that colour in Egyptian art is part of a complex system of symbolism, and not necessarily a reflection of actual colour in nature. It may also reflect the fact that few Egyptologists, with the exception of the likes of Newberry, Schweinfurth and Keimer (see 1-2-2), are or have been concerned with botany. Botanists, who may be assumed to be less aware of Egyptian artistic conventions, have queried the colours used: for example, lettuces depicted in tombs at Beni Hasan (Newberry 1893: I, pls. xvii, xx, xxxv) were described by Hartmann (1923: 56) as ‘...peintes en vert tirant sur le bleu...’ The botanist Harlan, queried the colouration of a ‘blue’ lettuce in the tomb of Nakht (TT 52; PM 1:1, 101, 4) which he later in the same article identified as *L. serriola* (Harlan 1986a: 7).

The blue colour may be a species characteristic or an indicator of different stages in plant growth, but it is equally likely to be a reflection of the purpose and function of Egyptian ‘art’ and symbolism or an example of grue as noted in 2-4. There is an unusual example of a small, yellow lettuce, outlined in red, may be to distinguish it from the pale background, depicted in the late Sixth Dynasty tomb H26 at Akhmim (Hope and McFarlane 2006: 211). Yellow was used to indicate youth, vigour, rebirth and regeneration and this painting appears to be a young lettuce symbolising these qualities. To a botanist, it could also be explained as an example of the expression of one of the recessive alleles which reduces the amount of green colouration (Ryder 1999: 31, Table 2.2).

Black in relation to lettuce is rare and is probably the result of degradation. One such example is the Ninth or Tenth Dynasty wooden inner coffin of *ḥršf-htp* found at Abusir, which is now in the University Museum, Leipzig (Inv. 3). The green pigment on the type L1 lettuce leaves and the lotus flowers has degraded to black but the lettuce stem has retained its white colour (Onasch 1997: 57-59, Abb. 49).
Harlan summarily dismissed the opinions of ‘scholars’ when identifying plants but nevertheless conveniently tabulated more of their suggestions under the heading ‘Identifications of “The Plant”’ (1986a: 4, 6). Notwithstanding, the knives and sickles used to harvest the plant as depicted in the tombs of Niankhkhnum and Khnumhotep, Mereruka and Neferherenptah (Lauer 1976: 154, pl. 138; PM III\(^2\), ii, 637-638, Map LXII. Plan LXV) appear to be unsuitable for working with wood and therefore trees can probably be excluded as a possible identification (1986a: 6).

Keimer (1924a & b) produced the first major scientific discussions which identified the plant in the Egyptian iconography as *L. sativa* although Loret had already made the identification as reported above. The identification of the plant depicted with Min as *L. sativa* by Keimer (1924a & b) has been accepted, but there are those, like Ryder and Whitaker (1995: 54), who still have reservations about whether the ancient Egyptian reliefs and paintings do, in fact, depict *L. sativa* but who offer no alternative solutions. The varied treatments of the plant in the literature and in the iconography have caused confusion amongst both botanists and Egyptologists (Harlan 1986a: 6) and further discussion of the problems concerning the execution of the iconography can be found in Chapter 4.

Whilst some of the changes in morphology may be attributed to artistic licence and to the canon of Egyptian art (for which see Schäfer: 1974), the uses which the Egyptians made of the plant and the consequent modification of the morphology through selective breeding for specific properties may also have contributed to the confusion.

However, apart from the attempts at identifying the plant, the origins and history of the lettuce did not unduly concern early Egyptologists who were presumably occupied with larger issues, such as deciphering the written language and establishing chronology. This may be because the significance of any such studies was not recognised. The application of sophisticated research techniques, such as those used in molecular biology, were not yet available to establish links between modern species and thence back to earlier mutations and cross-breeding of lettuce as Kessler *et al.* (1991) have done. Such techniques are enabling the tracking of
the dispersal and possible history of lettuce. Early researchers such as de Candolle and much later, Keimer had to base their judgements on artistic, linguistic and geographical evidence together with a comparison of available species.

Egyptologists are increasingly aware that it is not safe to rely on plant identifications made during the nineteenth century or to ignore cross-disciplinary studies such as molecular biology, which have already been successfully incorporated into bio-medical studies with mummies (Harer 1995: 67-70). This is a comparable situation to that in molecular biology where researchers have recently been urged to consider evidence from earlier periods and from other disciplines such as archaeology (Abbo, Lev-Yadun and Ladizinsky 2001: 310).

3-4 Problem of *Lactuca virosa*

The problems of identifying all the plant names used in ancient Egyptian texts have not yet been resolved and *L. virosa* may be one of these unresolved problems. The debate hinges on the identification of ‘β’ and ‘bw’ as discussed in 3-2-1. *L. virosa* was known in Assyria (see 3-7-1) but whether this species of *Lactuca* existed in ancient Egypt is still unproven. The Herbarium at the Dokki Agricultural Museum, Cairo has confirmed that it does not currently grow in Egypt (H. Abdel and M.M. Abdel: pers. comm. 2013). This statement is supported by Boulos who lists only *L. undulata*, *L. saligna* and *L. serriola* as wild species present in Egypt today (2002: III, 313-315).

The necessity for correct identification arises again with *L. virosa* for two reasons. Firstly, because an injurious plant may be indicated and secondly because, in modern herbalism and popular books, names both scientific and popular are frequently applied indiscriminately. *L. virosa* is often loosely called ‘wild lettuce’ and ‘wild lettuce’ is often synonymous with ‘prickly lettuce’.

Furthermore, all these terms can be interchangeable and applied to *L. virosa*, *L. serriola* and *L. sativa* respectively (see, for example Sayre 2001: 149, 203; Stuart 1979: 210).

The ancient Egyptian *materia medica* and pharmacopoeia were tested by Campbell and David (2010: 20-29) to identify which species of ancient Egyptian
plant has a pharmacological action in the modern species and to compare the ancient applications with contemporary use and thereby demonstrate the ‘pharmaceutical merit’ of the early prescriptions. The problems with translations and identification meant that a definite conclusion could not be reached in the case of *L. sativa*, but the New Kingdom Papyrus Ebers (Ebbell 1937; Ghaliounui 1987) indicates that ‘lettuce’ was used as an antirheumatic treatment for knee stiffness (Ebers 608, 670) and possibly as an anthelmintic for roundworm (Ebers 64) although this might refer to *β*or melilot (Campbell and David 2010: 27). It should be noted that modern uses of *L. sativa* are chiefly as a calming sedative, for a hypnotic irritable cough, rheumatic pain and whooping cough. Wild lettuce (*L. Virosa*) is prescribed in modern alternative medicine for hyperactivity, anxiety, necrosis, insomnia and as ‘non-addictive opium’ (Martindale 1958: 1768). *L. virosa* has also been tentatively identified as a hallucinogen (Schultes and Hofmann 1980: 366-367).

Papyrus Cairo 86637 (*Calendrier du Caire*) recto 1.3 refers to an interdiction against the eating of *ţ* on the feast day of the second day of *akhet*. A similar interdiction is made on the eighth day, described as ‘the feast for every god and goddess’ (1.9), but here *ţ* is followed ‘(or) mandrake’. These feast days are referred to in the Papyrus title as ‘The Manifestation Feasts’ which have been interpreted as occasions when statues of the various gods ‘went forth’ in procession to visit other gods or localities (Bakir 1966: 61 (2)) as did Min during *pr.t Mnw* to the lettuce fields. This suggests that, if *ţ* is lettuce and was dedicated to Min as an aphrodisiac, it was denied to celebrants at a feast dedicated to Min.

Papyrus Berlin 3027 Spell C II. 3-4 lists *β* and onions in a magic spell to protect babies against demons because of its ability to ‘inflict injury’. *ţ* is also rendered as *jai* (Erman 1901: recto ii, 3-5) and the reference to injury caused by the plant may be a pun on the word *fy*, meaning a bee that stings (Bakir 1966: 63 (26, 27). ‘Injury’ may be a reference to the haemorrhaging caused by the anti-coagulant dicoumarol that is produced when coumarin in *Melilotus officinalis*, which may also be *ţ*, degrades in mouldy hay. In the same Papyrus, Spell B I, 4, ‘bw’ is used
to refer to lettuce as a remedy for stomach pain, suggesting the discussion of two different plants (Dawson: 1934: 41; Yamazaki 2003: 12, 14).

Texts on the western upright of the door located in the north-west of the courtyard between the first and second pylons at Philae are addressed to the doormen and priests at the temple. The texts are known as the ‘Prohibition of Philae’ and forbid the bringing or eating of ʿβη/w within the temple.  

This plant has been associated with the ʿβη referred to in P. Cairo 86637 recto 1.3 and 1.9 and it has been suggested that L. virosa is referred to here, implying that in Ptolemaic times at least, two species of lettuce may have been in existence (Aufrère 1986: 2-6).  
The prohibited dates occur at the end of the dry season and the beginning of the annual Nile flood. This interdiction may correspond to the reproductive phase of the lettuce, during which the stalk elongates, flowers and produces seed, at which time there is an increase in latex in the plant with a concomitant increase in the sedative effect (Ryder 2003: 378). This suggests that the priests possessed a working knowledge of the changes in the effects of the plant during the year (Aufrère 1986: 2-6; 1999: 30-31). At the end of June (akhet) some modern varieties of lettuce in Upper Egypt produce a sticky white emulsion (Aufrère 1986: 3-6) which would accord with Ryder’s description of the latex exuding from the plant when it is damaged (2003: 378).

It has been suggested that ʿβη is a species of melilot as depicted in the New Kingdom tomb of Kha at Deir el-Medina (TT 8) (PM I:1 p.16) (Campbell and David 2010: 33-34) but, with the evidence that Aufrère cites, L. virosa also appears to be a candidate. Without primary evidence of either, a definite identification is impossible.

3-5 Botanical evidence for lettuce in ancient Egypt

Inevitably, speculation must play some part in reconstructing the evolution of the plant due to the length of time since the Lactuca species were first cultivated and domesticated, the dearth of early written and archaeobotanic evidence and the

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19 Other forbidden plants and animals are listed in Junker (1959; III, 151-160).
20 For the orthography of ʿβη and ʿβη/w see Aufrère (1986: 2).
21 In a botanical context cultivation is a human activity involving a number of processes such as watering and protecting plants whilst domestication is the genetic response of the plant to such
timespan of Egyptian civilization. But the accident of preservation is probably the
greatest barrier to gauging the development and dispersal of the lettuce. Whereas
cereals and legumes with large seeds, pips, kernels and fruit stones leave
archaeological evidence or imprints, the records of leafy vegetables are distorted
because the perishable soft tissue of plants like lettuce do not in general leave any
trace. Soft, moist tissue makes little or no imprint in material such as mud and the
leaves do not char. Leaves gathered from young lettuce plants that have been
prevented from bolting leave no seeds and hence no archaeobotanic evidence will
survive for those plants (Leach 1982:1-2; Zohary and Hopf 1993: 236; van der
Veen 1998: 108). It is also difficult to distinguish between archaeological
specimens of domesticated and wild species (Harris 2005: 15) but this problem
does not arise with Lactuca species in Egypt because of the dearth of evidence
discussed below.

Furthermore, early excavators ignored or destroyed the sources for what little
archaeological evidence existed for kitchen gardens and often only small areas of
temple gardens were investigated in preference to those around the more
significant monuments (Wilkinson 1998: 121). Additionally, the failure or laxity
of early archaeologists to publish their excavations has also hindered progress
(Hugonot (1989: 7).

A further recurring difficulty when identifying lettuce in lists on, for example
ostraca, is its possible inclusion under the generic terms of ‘vegetables’ (smw)
(Gardiner sign M21), nwp (Gardiner sign M39) or wfd (greens), a problem that
Janssen encountered in his research into Ramesside price lists (1975: 367).

When considering the origins of any plant ‘…the only reliable form of
evidence…’ is robust, primary archaeobotanic evidence (Nesbitt 2004: 38) and
there are, to date, only four known examples of lettuce seed, tentatively dated as
shown in Table 3-2. A fifth, undated seed sample was held in the Berlin Museum
(Braun 1877: 290; Hartmann 1923: 65) but this was destroyed during the Second
World War (Murray 2000: 632).

operations. Wild plants can, therefore, be ‘cultivated’ and cultivated plants are not necessarily
domesticated (Harlan 1992: 64).
<table>
<thead>
<tr>
<th>Found</th>
<th>Condition &amp; number</th>
<th>Date</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>In fabric of Roman pottery purchased in Luxor, provenance unknown</td>
<td>Desiccated, large number</td>
<td>Believed Roman</td>
<td>Darby, Ghalioungui &amp; Grivetti 1977: 679; Germer 1985: 185</td>
</tr>
<tr>
<td>Mons Claudianus</td>
<td>Desiccated, single seed</td>
<td>Roman</td>
<td>van der Veen 1998: 108; 2001: 183, Table 8.5, 200-201</td>
</tr>
<tr>
<td>Mons Porphyrites fort</td>
<td>Desiccated, single seed</td>
<td>Roman</td>
<td>Peacock &amp; Maxfield 2007: 97</td>
</tr>
<tr>
<td>Quarry dump, Workmen’s Village, Amarna</td>
<td>Desiccated seeds</td>
<td>Eighteenth Dynasty</td>
<td>Stephens &amp; Clapham 2014: 159</td>
</tr>
</tbody>
</table>

Table 3-2
Finds of primary evidence for *Lactuca* species in ancient Egypt
(In order of publication)

3-5.1 Evidence for lettuce as a food source at isolated sites.
Lettuce seeds have been recovered from the isolated site of Amarna in Middle Egypt and the evidence indicates that a variety of fruit and vegetables were grown at the site using imported water supplies (Stevens and Clapham 2014: 152, 154, 159).

The much later Roman site at Mons Claudianus was a five day journey from the Nile Valley through the Eastern Desert. There were three sources for food supplies for this and other Eastern Desert sites: the Nile Valley, vegetables cultivated locally by the inhabitants and a few plant species collected from the surrounding desert vegetation (van der Veen 2001: 221-222). The climate in the region has changed little since the first century AD with an annual precipitation of around 5 mm. Most of the staple and luxury supplies were imported because of the aridity of the environment at these sites. At Mons Claudianus two catchment walls were built across the junction of two of the main wadis to capture any rainfall but most of the water appears to have been supplied by a well close to the fort (van der Veen 1996: 137-138; 201: 200).
It is to be expected that, if lettuces were transported as mature plants to the remote sites for food or oil production, they would require watering on the journey or they would rapidly wilt and become inedible in the extreme desert temperatures. Lettuce, like cabbage, is eaten before the seeds set, so seeds could not have been accidentally transported with the leaves. Seeds must have been imported and lettuce grown at this and other sites producing more seed (van der Veen 2001: 200). This is supported by evidence on an ostracon of the first century AD found in midden deposits at Mons Porphyrites, which attests to lettuce, cabbages and an asparagus plant being grown at the nearby fort of Raïma and delivered to the centurion, Iulius Aquila. These plants would not have been transported far, so wilting was probably not a problem. The evidence pre-supposes that water was available to irrigate the vegetables or that Fabricus, the grower, could afford to import the extra water for crop growing. The centurion’s request for vegetables suggests that they were obtained through private enterprise and were not part of the official supplies (Bingen et al. 1997: 370; van der Veen 2001: 219).

‘Au centurion Iulius Aquila, Fabricus, curator de Raïma, salut. Tu m’as souvent écrit au sujet des légumes pour savoir s’ils ont poussé dans mon jardin ici. Je t’ai envoyé …bottes de choux, une asperge, deux bottes de laitues…Seigneur, envoie…’ (Bingen et al. 1997: 370).

Three other ostraca, O. Claudianus 227, 332 and 280 mention vegetables and seeds which suggests that vegetables must have been grown at the site (van der Veen 2001: 219). Interestingly, at Myos Hormos, also a five day journey from the Nile and of comparable date to Mons Claudianus, no evidence for lettuce is attested until that discovered in the Islamic stratum (van der Veen, Cox and Morales 2011: 161-162, Table 4.7).

Textual evidence exists in the Tebtunis Papyri 112 and 116 for the cultivation of lettuce in kitchen gardens at Kerkeosiris in the Fayum during the Ptolemaic Period but at this site water was readily available for crop cultivation (Crawford 1971: 116).
There appears to be no primary evidence for lettuce seeds or plants at the settlement at Elephantine, although Egyptian written and pictorial sources attest to the plant existing in the area (Willerding and Wolf 1990: 226).

It is not clear whether lettuce was offered to Min or later to Min-Pan at these remote sites or whether the plant was grown or imported for consumption only, but in the Ptolemaic Period lettuce was still being depicted as offered by the king. Once again, the dearth of primary evidence precludes any conclusion. It is also feasible that the lettuce was not offered at these sites because, with the association of Min with Pan, lettuce was no longer of importance in the changing religious system. Min, however, was still important and his name is attested in the Greek names Paminis and Peterminis on ostraca from Berenike at the end of the Koptos route to the Red Sea (Bagnall, Helms and Verhoogt 2000: 24).

Whilst textual sources attest to the existence of the plant in Mesopotamia in the ninth and eighth centuries BC (Grayson 1972: 176; Thompson CuT22 XIV, 50; Leach 1982: 5; Zohary and Hopf 2001: 192) there is no secure, primary evidence known for the lettuce in Egypt at present other than the examples discussed above. Consequently, the inscriptions, texts and depictions, which occur relatively late in the evolution of the lettuce, constitute the evidence for the existence of the plant in Egypt from the Pharaonic Period to Roman times. Evidence for the cultivation of the plant is found in Old and Middle Kingdom tombs (see 3-6-1) after which there is a gap in the knowledge until records of lettuce appear in the Greek and Roman literature (see above) (Zohary and Hopf 1993: 192, 234, 236).

3-6 Origins and dispersal of lettuce

There are currently two lines of research into the origins of *Lactuca* species that are being undertaken worldwide, each with differing aims. Firstly, the commercial potential of *Lactuca* species in horticulture, particularly in the USA, Israel and lowland Europe, has resulted in intensive research programmes to trace the evolution and progenitors of modern *Lactuca* species with the aim of improving

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22 CT is the standard abbreviation for Cuneiform Texts. In order to avoid confusion with the CT that is the standard abbreviation for Coffin Texts in Egyptology, CuT is used here to denote Cuneiform Texts.
disease resistance in modern cultivars (see for example Chin, Arroya-Garcia, Ochoa, Kesseli, Lavelle and Michelmore 2001: 735-746). In conjunction with commercial research based on molecular biology and plant genetics into the ‘wild progenitors’ or ‘...wild genetic resources...’ of lettuce (Zohary 1991: 31-35; Zohary and Hopf 2001: 7-11), recent studies have increased the knowledge of the evolution of the lettuce and its morphology which may have relevance to the association of Min with the plant (Truco et al. 2007: 735-746).

Secondly, interest in the medicinal properties of the plant was aroused within Egyptology in the twentieth and twenty-first centuries (Campbell and David 2010: 20). This has led to pharmaceutical interest in the re-assessment of some of the properties of the lettuce, particularly in the re-investigation of claims that lettuce is a sedative and anti-tussive used in herbal and folk remedies. Early results from recent studies indicate that the oil from L. sativa has the potential to be a risk free, natural remedy for sleep disorders (Yakoot, Helmy and Fawal 2011: 451-456).

Vavilov has proposed a phyto-geographically based system of eight centres of origin for cultivated plants, locating L. sativa in his Asia Minor and Mediterranean centres (1992: 340, 344). His initial theory was later refined to include secondary centres of diversity and secondary crops which derived from the weeds found in earlier primary crops such as oats (Harlan 1992: 51). Although Harlan refined Vavilov’s system to three geographic centres plus a number of centres of diversity, preferring to name them regions rather than centres, he also considered that it was time to abandon the concept of centres of agriculture and origin theories as no specific time or place can be ascribed to either (1986b: 30; 1992: 51-53).

Genetic evidence does not fully support Vavilov’s theory that cultivation and domestication had a limited number of core areas, but his theories have not been entirely superseded by that of dispersal from Western Asia (Fuller, Willcox and Allaby 2011: 628-652). It has been found that there are many more centres of origin or none at all depending on the species, but Vavilov’s work remains the foundation for the study of the subject and his term ‘centre of origin’ remains in use (de Vries 1997: 167). The current consensus of opinion is that Lactuca species
originated in a number of locations in Southern and Western Asia. The Royal Horticultural Society of Great Britain (RHS) (1992: 111: 4) for example, states that *L. sativa* originated in the Near East, the Mediterranean or Siberia from where a specimen was collected (De Candolle 1959: 95). Zohary (1991: 31) has southwest Asia as the centre of species diversity for *Lactuca* but Harlan (1992: 70) and Ryder and Whitaker (1995: 54) cite only the general region of the Mediterranean as a probable site of origin. De Vries (1997: 165-174) stated that cultivated lettuce dispersed from the Fertile Crescent to Egypt. Although the soil in Mesopotamia had a high salt content (Zohary and Hopf 1993: 53, 237), this would not have precluded the evolution of *Lactuca* in Mesopotamia as the lettuce is tolerant of saline conditions (RHS 1992: 53). In her discussion about the dispersal of lettuce, de Vries describes lettuce being used as a sacrifice to Min but she makes a fundamental mistake, given the appearance of Min, when describing him as feminine (1997:168).

Early *Lactuca* species may have arrived in Egypt through the process of adaptive radiation utilising the vectors of wind, water or animals but human-mediated dispersal is probably the most important factor involved through trade, warfare and human migration (Prance 2005: 27-28; Nathan 2006: 786-788). Other factors which can affect the dispersal and domestication of the lettuce, based on research into ancestral populations of founder crops and centres of origin, are the disappearance and reappearance of species and a given species may have been domesticated more than once in different locations (Prance 2005: 27-28; Willcox and Tanno 2006: 296-297). A more detailed consideration of the on-going dispersal and movement of species in Egypt was made by Boulos and el-Hadidi (1994: xiii-xiv).

An alternative view about the origins of species and varieties of *Lactuca* suggests that, based on the evidence in the iconography and as a result of domestication and cultivation of wild plants, lettuce varieties may have developed in Egypt and not elsewhere (Täckholm 1951; Lindqvist 1960: 339-340; Férakova 1976: IV, 330).

With the advent of DNA mapping and advances in cytogenetics, it has been demonstrated that a group of populations of *L. serriola* or ‘...other unknown
entities...’ were progenitors of *L. sativa* (Kesseli, Ochoa and Michelmore 1991: 430-436; Hill, Witsenboer, Zabeau, Voc, Kesseli and Michelmore 1996: 1202-1210) but further pursuance of this line of research lies beyond the scope of this thesis.

The earliest date for which there is, albeit only secondary, evidence for the lettuce occurs in tomb depictions and indicates that a long-leaved form of lettuce (type L1) was already being grown in Egypt as early as the Fifth Dynasty, c. 2400 BC. These representations fall into two categories: lettuce plants as offerings (Kanawati and Hassan 1997: pls. 47, 50; Harpur and Scremin 2008: scenes 316, 380) and lettuce growing in tended gardens (Wreszinski 1936: pl. 118, Taf. 59; Duell 1938: pl. 20, 21; Harpur and Scremin 2010: scene 130; Figs. 3-4, 3-5; Table 3-3 below). Given that the Fifth Dynasty is currently the earliest date for which there is evidence for the plant in Egypt and that by this time it is evident that the plant was already being cultivated, the date when lettuce was introduced is impossible to calculate until further primary evidence is discovered in context.

3-7 Domestication

The domestication of plants appears to follow a three phase pattern.

- Annual plants are gathered from wild populations
- Desirable specimens are selected from wild species and deliberately cultivated in demarcated areas alongside wild plants
- These specimen plants are domesticated, a process in which genetically mutant plants are selected for desirable properties (Weiss, Kislev and Hartmann 2006: 1608).

As Wenke says in a discussion of the process in the context of ancient Egyptian agriculture, early plant growers could not engineer modifications: they could only select from the results of random mutation in the wild plant (Wenke 2009: 144-146). Some species were domesticated and then abandoned whilst others like *Lactuca* continued to be cultivated and domesticated. Weiss *et al.* (2006) maintained that the crucial stage is cultivation because it is then that the cycle of collecting wild seed, sowing and repetition of the processescan enable the selection of the most advantageous genotypes and lead to selective breeding. This conscious selection through trial and error may have speeded up the development
of novel characteristics which were species specific but not all cultivated species were domesticated. There is a continuing debate about plant evolution and the influences of conscious and unconscious selection and again it appears that a combination of both systems might be the most appropriate (Darwin 1868, 1875; Heiser 1987: 77-81; Zohary 2004: 5-10).

A weed may be defined as a plant adapted to disturbed or open habitats, often requiring high soil nitrogen and capable of establishing itself where forest and grassland have been destroyed (Harlan and de Wet 1965: 16-24). This ecological definition is important as it has relevance to lettuce and the ‘dump heap theory’ developed by Anderson (1967: 136-150) from an idea by Sauer (1952). The ‘dump heap theory’ suggests that the Egyptians might have become aware of the properties of plants that grew close to early settlements or noticed them as invasive weeds in crops (Dempewolf et al. 2008: 1148). The Egyptians then actively began to domesticate and subsequently modify these wild plants by selective breeding.

The dump heap theory is challenged by those who consider that selection and farming developed over a long period and were influenced by the edible properties of plants and cultural pressures and not by the domestication of ‘weeds’ (Harlan 1992: 39-40; Abbo, Gopher, Rubin and Lev-Yadun 2005: 491-495). Ultimately, the dump heap theory of weeds growing on disturbed ground or on middens close to habitation may have applied to only a few cultigens (Harlan 1992: 46) and it is feasible that the lettuce may have been one of them (Zohary and Hopf 1993: 53). Whether or not they were dump heap plants, some wild species would have grown close to human habitation on disturbed soil and it seems reasonable to assume that in any system of trial and error plants would have been seen and selected for palatability or other useful traits (Weiss et al. 2006: 1608-1610). By subsequently cultivating such plants close to habitation they were not only readily available to eat but were observable and those which hybridised or mutated toward human requirements could be selected and propagated. Wild varieties would have been collected during the weeding of cultivated crops and the consumption of wild plants may also have been forced upon populations in
time of famine, ultimately resulting in their adoption into the normal diet (Leach 1982: 2; Germer 1998: 89; Smith 2003: 60).

In the case of lettuce for consumption, the emphasis would have been on developing a slow bolting, non-prickly plant with a firm heart and bunching of the leaves and a reduction in the bitter latex (Ryder and Whitaker 1995: 54) (see below). It is reasonable to assume that leafy vegetables such as lettuce which have a short growing season, were first cultivated close to habitation to facilitate harvesting and to make successive sowings. This would have extended the cropping season, brought about the need for enclosure as protection against predators and probably gave rise to what is now referred to as ‘kitchen gardening’ (Leach 1982: 1-16).

3-7-1 Significance of ancient Egyptian gardens and lettuce cultivation

The subject and symbolism of Egyptian gardens has been researched by Hugonot (1989) and a brief overview is given here. The layout was formal, enclosed and frequently geometric in which symmetry played a large part. A water supply was essential in the Egyptian climate and pools and lakes were often incorporated in garden design.

Egyptian gardens fall into three categories:

- Utility, which included vegetable cultivation, vineyards and orchards as a luxury for the elite
- Temple gardens which supplied the offerings to the gods

Vegetables and fruit were grown on a relatively small scale in domestic gardens to provide food – and whilst there are depictions of men cultivating gardens (Twelfth Dynasty tomb of Sarenput at Aswan; TT 53; 96; 100; 125; 179), the only attested depictions of the cultivation of lettuce are listed in Table 3-3. It has been suggested that any surplus was sold as fresh produce at local markets (Wilkinson 1998: 171; Rizzo 2005: 5-6). A boat depicted in the tomb of Menna is said to be carrying produce that may include lettuce in the containers on the cabin roof, but this appears to be a boat in a funerary context (TT 69) (PM I.1, p. 138, 9) (Vandier 1969a: 970, n3; fig. 363).
<table>
<thead>
<tr>
<th>OWNER</th>
<th>SITE</th>
<th>DYNASTY</th>
<th>ACTIVITY, LETTUCE</th>
<th>REFERENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ptahshepses</td>
<td>Tomb, Abusir</td>
<td>5</td>
<td>Cutting &amp; watering L1</td>
<td>Verner 1986: 67-69, 74, photo 55-56, 58-60, pls. 33-34</td>
</tr>
<tr>
<td>Niankhkhnum &amp; Khnumhotep</td>
<td>Tomb, Saqqara</td>
<td>5</td>
<td>Cutting, watering L1</td>
<td>Moussa &amp; Altenmüller 1977: 76-77, Taf. 20-21, Abb. 8</td>
</tr>
<tr>
<td>Solar temple of Ne-User-Re (Ini)</td>
<td>Abu Gurob</td>
<td>5</td>
<td>Hoeing or preparing to open an irrigation channel L1</td>
<td>Edel &amp; Wenig 1974: pl. 15</td>
</tr>
<tr>
<td>Feteka</td>
<td>Tomb LS 1, Abusir</td>
<td>OK</td>
<td>Watering L1</td>
<td>LD II, 96 Bárta 2001: 79, 93-94, figs. 3.10, 3.16</td>
</tr>
<tr>
<td>Rashepses</td>
<td>Tomb, Saqqara</td>
<td>5</td>
<td>Cutting &amp; watering L1</td>
<td>LD II, 61a</td>
</tr>
<tr>
<td>Mereruka/Meri</td>
<td>Tomb, Saqqara</td>
<td>6</td>
<td>Cutting, watering L1</td>
<td>Wreszinski 1936: 118, Taf. 59 Duell 1938: pls. 20-21</td>
</tr>
<tr>
<td>Niankhnesut</td>
<td>Tomb, Saqqara</td>
<td>6</td>
<td>Cutting, watering L1</td>
<td>Kaiser 1967: 32 [295], Abb. 295</td>
</tr>
<tr>
<td>Mehu</td>
<td>Tomb, Saqqara</td>
<td>6</td>
<td>Cutting, watering L1</td>
<td>Altenmüller 1998: 207, Taf. 102 [5]</td>
</tr>
<tr>
<td>Amenemhet</td>
<td>Tomb 2, Beni Hasan</td>
<td>12</td>
<td>Cutting watering L7</td>
<td>Newberry 1893: tomb 2, pl. xi</td>
</tr>
<tr>
<td>Khnumhotep</td>
<td>Tomb 3, Beni Hasan</td>
<td>12</td>
<td>Watering, harvesting L7</td>
<td>Newberry 1893: tomb 3, p.2</td>
</tr>
</tbody>
</table>

Table 3-3. Known depictions of men cultivating lettuce

125
Evidence for a nursery bed of young lettuce in a temple garden is depicted in the tomb of Nakht, Bearer of the Floral Offerings of Amun, probably of the reign of Amenhotep III (figure 3-12) (TT 161) (PM I: I, p. 274, 3, Map II D6, d3).

Fig. 3-12
Lettuce in the garden of Amun (centre panel, bottom register)
Tomb of Nakht, (TT 161) Dra’ Abû el-Naga’ South.
(Adapted from a reconstruction by Cincotti & Ghisolfi in Manniche 1989: 17).23

There is little evidence to suggest inter-cropping in Pharaonic Egypt i.e. different vegetables grown together in the same plot, apart from ḫḏw, a spring onion variety of *Allium cepa* L. (Murray 2000: 628-629). Such onions are depicted being harvested in the same plot with lettuce on the west wall of the main chamber of the Twelfth Dynasty tomb of Khnumhotep III at Beni Hasan (Newberry and Fraser 1893: I, pl. xxix) and onion plants growing with lettuces are depicted in the tomb of Niankhkhnum (Fig. 3-13) (Moussa and Altenmüller 1977: Abb. 8), as they are in figure 3-3 above.

Fig. 3-13
Onions (arrowed in purple) growing alongside lettuces.
Tomb of Niankhkhnum.
(Adapted from Moussa & Altenmüller 1977: Abb. 8)

23 The original is held in the British Library (Hay MSS 2922, 96) but it does not reproduce well.
In addition to being consumed and used medicinally for their anti-bacterial properties, in pregnancy testing (Campbell and David 2010: 28, Table 2) and as a remedy against snake bite (P. Brooklyn 41, 42; Graindorge 1999: 322, 329-330), onions frequently appear on offering tables with bread (Murray 2000: 629-630) but with no apparent specific meaning (Graindorge 1999: 324). They are, however, referred to in PT 35a and PT 79a where they represent teeth for the deceased king to be able to eat in the afterlife:

‘O Osiris the king, take the white teeth of Horus, which shall furnish your mouth-5 bunches of onions.’ (PT35a Faulkner: 1969).

The earliest archaeobotanic evidence for onions was found in the body cavity of a Thirteenth Dynasty mummy and it has been suggested that this was ‘believed to stimulate the dead to breathe again’ (Ruffer 1919: 6; Täckholm and Drar 1954: 102; Strouhal 1992: 128). However, this dating was disputed by Smith and Dawson and may be Eighteenth Dynasty (1924: 165).

The Egyptian onion propagates twice a year and this led to its association with the festivals of Sokar and Bastet which ensured the re-appearance of the light of the moon and sun (and drove away snakes) and because of this capability the onion was believed to guarantee the cosmic order (Graindorge 1999: 33). It is because of this latter function that the onion may have been grown with lettuce to supplement its aspects of fertility and regeneration.

Vegetable and kitchen gardens were important for providing food but were depicted only in Old Kingdom, First Intermediate Period and Middle Kingdom iconographies, after which the tomb decorative programme altered to include pleasure gardens which were thought to depict an ideal world in the afterlife (Hugonot 1989: 222).

Whilst a pleasure garden is attested as early as the Fourth Dynasty in inscriptions in the funerary chapel of Metjen, originally at Saqqara and now in the Ägyptisches Museum und Papyrussammlung, Berlin (Berlin inv. no. 1105) (Rizzo 2005: 3), vegetable gardens are not attested in tombs until the Fifth Dynasty. They replaced scenes of pleasure gardens, becoming rarer in the First Intermediate Period and Middle Kingdom, eventually disappearing at the start of the New
Kingdom. Kitchen gardens were replaced, particularly in the Eighteenth Dynasty, by depictions of luxury pleasure gardens with vineyards and orchards but these, too, disappeared in the Ramesside Period. They remained an important topic in love poetry and literature (Hugonot 1989: 268). Pleasure gardens are not considered further here as they did not include lettuce.

It is often difficult to distinguish between the temple gardens and temple agricultural holdings. The produce of lands owned by temples contributed significantly to the wealth of the temples and the power of the priesthood. Temple gardens both inside the temenos and in the open countryside supplied food and flowers for offerings to the temple and to elite burials in the necropolis (see, for example, the Fifth or Sixth Dynasty tomb of Nebkauhor at Saqqara (PM III 2, 627 and Map LX1, Plan LXIV; Hassan (re-ed. 1975 Iskander) 16-18, fig. 3). Given the huge amounts of lettuce required for daily, festival and funerary offerings in addition to food production throughout Egypt, copious areas of land must have been dedicated to the growth of this one vegetable, bearing in mind that plants also had to be left to produce seed for future cropping.

However, vegetable gardens still continued to be depicted during the Eighteenth Dynasty in the tombs of some of the temple administrators. Men such as Nakht and Sennefer had held offices in their lifetimes which related to the temple gardens and the tomb paintings proclaimed the important positions and status they had attained (PM I: I, TT 161: 3, iii; (PM I: I, TT 96: 4) (Hugonot 1989: 222-229).

Archaeological evidence for gardens is scarce, for the reasons detailed above, but evidence for the rectangular beds used to cultivate vegetables has been uncovered at a number of sites. Excavations at the Eighteenth Dynasty site at Amarna and at the Ramesside site of Amara in Nubia have revealed well-preserved examples of beds divided into plots or squares of approximately 37-52 centimetres, having an ideal size of approximately one non-royal cubit. The plots were arranged in a bed consisting of rows of plots separated by a low wall of mud bricks set on edge, which retained the 12 centimetres deep black, alluvial soil. The beds at Amarna were built directly onto the desert surface and were surrounded by a protecting

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24 Detailed discussions of the garden and its significance in ancient Egypt can be found in Hugonot 1989; Rizzo 2005.
wall (Fig. 3-15). Irrigation channels were filled from a shaduf, well, by canals, from the Nile or had a pond (Shinnie 1922: 633-635; Griffith 1924: 303, pl. XXXIV, 2; Borchardt and Ricke 1980: 236-238, plan 73 Kleinhäuser N49.9; Hulin 1985: 29-35, fig. 3.2; Bomann: 1987: 50-53, figs. 4.2; 4.5; 4.6; Hugonot 1989: 225-228).

Fig. 3-14
Garden plots at Amarna
(Adapted from Bomann 1987: fig. 4-6)

The system of small plots marked out in rectangles is still in use today (Fig. 3-15).

Fig. 3-15
Modern field plots outside the Ramesseum, Thebes
(Taylor 2013)
3-7-2 Min, ḫsp, ḫṯjw and Min’s connections with gardens

Two epithets applied to Min are ‘Mnw ḫsp’ (variant ḫsp.t) and ‘Mnw ḫt ḫṯjw.f’ neither of which were satisfactorily explained in Gauthier’s time and which remain somewhat enigmatic today (Gauthier 1931: 232). The general term for garden is represented by ![Gardiner Sign N24](image) ḫsp with the determinative Gardiner sign N24 indicating land marked out with irrigation channels as described above. ḫsp may have derived from ḫsb meaning either ‘reckon’ or a patch of land measured out and designated for growing plants which came to represent cultivated land in contrast to the desert and, by association a garden, orchard or vineyard (Wb III: 162, 4-6; Hugonot 1989: 15-16; Wilson 1997: 678; Thiers 1999: 114). It is first attested in PT 126 (Faulkner 1969: 39; Sethe 1960: Utterance 210, 126c line 598).

Prior to the Sixth Dynasty, Min was not depicted with lettuces but during the Sixth Dynasty his iconography took on its final form and included varying numbers of the plant. The earliest attested examples of Min standing on a platform in front of lettuce plants are the two commemorative stelae from the time of the first sed-festival of Pepi I (figs. 2-7a and b) which were discussed in 2-2.

From the reign of Amenhotep III, at Luxor and later Karnak, the ḫsp began to be depicted separately from Min but still with three or more lettuces on the top (Fig. 3-16). The plants were later depicted in a stylized form on reposoirs carried in pr.t Mnw and still later became stylised further into representations of a naos which thereafter continued to be the case (Gauthier 1931a: 168-171).

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**Fig. 3-16**

Fragment of New Kingdom stela, Dynasty XVIII- XIX.
UC 14601

Petrie Museum of Egyptian Archaeology
© University College of London 2013
It has been suggested that the trapezoid on which Min stands represented the primordial mound in the ‘Festival of the Stairs’ (Sethe 1919: 312; Hassan 1928: 169, 173; Frankfort 1978: 188) but the use of this title was criticised by Bleeker (1931a: 54; 117). Bleeker considered that the most important part of the pr.t Mnw ritual was the ‘Raising of Min on his stairs’ and that it was so mysterious and significant it could not be portrayed or committed to an inscription (1956: 98).

Stairs or steps can represent the interface between the living world and the afterlife and can also be regarded as a symbol of regeneration. It is feasible that the trapezoid does not represent the primordial mound for two reasons: linguistic, which is discussed below and the fact that the trapezoid has only one step and not steps or stairs in the plural. Depictions of Min standing on four steps are attested on the stela of Aku discussed in 2-2 and on a rare representation of Min found in a tomb context in tomb 124 at Riqqeh, in which a pendant figure of Min is standing on stairs (Fig. 3-17) (Manchester Museum 5969) (Engelbach 1915: 12-13). The pendant or amulet is gold with turquoise and lapis lazuli inlay in the crown, most of which is now lost. The presence of a pendant figure of Min at the neck of the deceased, with its male procreation connotations, suggests that the body was male and that the excavator had incorrectly sexed the corpse as female, as has been suggested (Gratjetski 2014: 107). In his excavation report, however, Engelbach (1915: 12) clearly states that the body, although crushed under fallen marl and the body of a tomb robber, appeared to be male and no mention is made of a female identification. Min is not usually associated with females and the jewellery assemblage is characteristic of an elite male burial.

Fig. 3-17 ‘Riqqeh Min’ (Manchester Museum 5969) as it appeared in 1915 (Engelbach et al. 1915: pl. I, 3)
Fig. 3-18
Riqqeh Min in 2014: damage to the stairs is clearly visible.
© Manchester Museum, University of Manchester.
At the Twentieth Dynasty temple of Medinet Habu, \textit{pr.t Mnw} is known as \textit{pr.t Mnw r h\textacute{t}jw} going out of Min to the \textit{h\textacute{t}jw}. Although \textit{h\textacute{t}jw} has not yet been clearly interpreted, it is used exclusively in relation to Min (Gauthier 1931a: 117). A number of explanations have been proposed and these are considered below.

There are two words that are spelt differently but are both transliterated \textit{h\textacute{t}jw}. The first takes the determinative Gardiner sign O40 which Frankfort, Sethe and Hassan interpret as a staircase but which Gardiner defines as ‘terrace or terraced hill’. The second version means ‘threshing floor’ and ends with Gardiner sign N23 (Gardiner 2001: 586).

The second version is used in the text of the ceremony of Driving the Calves found on the Great Portal of Ptolemy III Euergetes I at Karnak (PM 226, 3 register III)\textsuperscript{25} where the king says to Min:

‘…\textit{I drive them for thee at thy coming forth to thy threshing floor}…’

Min accepts the king’s offering and promises in return:

‘\ldots\textit{beholding thy beauteous grain. I produce...for thee, flooding for thee thy threshing-floor, so that thou reapest thy harvest in gladness}…’

(Blackman and Fairman 1949: 106-107, Text III Lines D, G)

This text suggests that the original ritual was an agricultural one in which the image of Min was carried to the threshing floor (\textit{h\textacute{t}jw}) to preside over the actual threshing. The calves were offered to Min, in return for which the god ensured a successful harvest for Egypt (Blackman and Fairman 1950: 63,1; 77).

The ‘staircase’ determinative O40 may represent what Gauthier called the ‘reposoir’ or portable altar of Min in the \textit{pr.t Mnw r h\textacute{t}jw}:

It has been suggested that ‘…\textit{Min sur le h\textacute{t}jw}…’ could be construed as ‘…\textit{Min debout (régissant) sur le desert arabique} …’ because the original meaning of Min ‘\textit{sur son reposoir}’ refers back to ‘\textit{Min sur les falaises étagées du désert arabique}’ at a period when the desert may have been grassland. It was also demonstrated that \textit{tp h\textacute{t}jw.f} meant that Min was god of the fertile plains between the desert and

\textsuperscript{25} The earliest known attestation of this ceremony or ritual is from the Eighteenth Dynasty at Deir el-Bahri (Naville V, pl.134; VI, pl. 164).
the Nile valley as well as the mountains and desert and that Min originated in the desert. The trapezoid sign on which Min stands represents the sloping side of the desert plateau down to the river, a meaning that had become corrupted over time and eventually came to represent the pedestal on which Min stands (Gauthier 1929: 41-82).

A different solution combining ḫsp and ḫtw proposes that ḫtw were the raised lettuce beds dedicated to growing lettuce for the god to which Min was transported in pr. t Mnw r ḫtw and where he was placed, possibly re-enacting a predynastic agricultural fertility rite of Min as a rain god or as a protective god of the crops (Moens 1985: 68; McFarlane 1995: 351-352). The two early types of depictions of Min standing upon bases representing the squared fields and the mꜣt symbol, both with tall lettuce plants growing behind Min are evidence for her claim (Moens 1985: 69). Two textual references are also used in support of Moen’s argument: one of Min’s Coptite epithets is tp ḫsp ḫr ḫtw (first of the garden who is on the ḫtw) and the fertile land of the Coptite nome was known as ḫtw ḫsp (Gauthier 1929: 63, 80-81).

Moens appears to have missed the depiction of the kneeling attendant apparently placing the statue on the lettuce garden in the heb-sed chapel of Senusret I (Lacau and Chevrier 1956: pl. 41, scene 30) as discussed above, which would also support her theory. A further scene in the heb-sed chapel where the king appears to embrace the statue, suggests that this might be a representation of the king placing the statue on the ḫsp.

One comprehensive, concise meaning of ḫtw is still to be achieved but it is suggested that whilst ḫsp is the generic term for garden, ḫtw is the specific name for the lettuce gardens dedicated to Min who was master of all fields and gardens.

Additionally, Min was associated with gardens through his living in the dom palm (H. Thebaica), which was frequently depicted in New Kingdom tomb paintings of the afterlife. Min was god of fertility and bountiful harvests and the dom palm produced quantities of fruit which resembled male genitalia. The tree was depicted alongside water irrigating the fields (TT 218, TT 290) and this combination of water and dates was a powerful symbol of fecundity and regeneration according to PT 403:
'... O you Bulls of Atum, make the King sturdy, strengthen (?) the King more than the Nt-crown which is on him, more than the flood which is on his lap, more than the dates which are in his fist.' (Trans. Faulkner 1969: 132)

PT 403 was regarded as such a powerful invocation that it became incorporated into the offering ritual (Baum 1988: 288).

The focus changed in the Ramesside period to the dom palm growing in the desert beyond the cultivated land, in the landscape under the jurisdiction of Min. The tree has very long roots which can reach underground water sources, enabling it to survive in arid conditions and its presence in the landscape indicated a water source for travellers. The dom was, by association, consequently regarded as a source of water for the deceased in the afterlife. In three Ramesside tombs at Deir el-Medineh, the deceased are depicted, in almost identical images, crouching in the position of adoration beside a dom palm, drinking from a pool: TT 3 Pashedu; TT 218 Amennakht26 (Fig. 3-19) and TT 290 Irinufer (PM I: I, 10 (4-5); PM 1:1, 19 (7); PM 1:1, 373 (vaulted ceiling). (Fecht 1965: 73-75; Baum 1988: 284-287, 290; Hugonot 1989: 171; Wilkinson 1998: 108).

![Image](image.png)

**Fig. 3-19**

*H. thebaica, Amennakht drinking from a pool. (TT 218)*

(Adapted from Davies 1936: 102)

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26 The original caption to Davies’ illustration states ‘Amennakhte worships beneath a dûm palm.’
Spell 124 of the Book of the Dead expresses a wish by the deceased to be regenerated and to plough the fields where his dom palm is the abode of Min:

‘...I plough my fields in my own shape, and my dom-palm is that upon which Min is.’ (Trans. Faulkner 1972: 114)

It has been suggested that the dom palm represented the masculine entity Min and the date palm (Phoenix dactylifera L.) his feminine counterpart, the goddess Nut. Together they ensured the male sexuality and feminine fecundity of the deceased and his wife and thus their regeneration (Baum 1988: 286; Hugonot 1989: 171).

The dom was sacred to Min but the association with fertility and fecundity did not end there: the tree was also sacred to the apotropaic goddess of childbirth, Taweret. Evidence for her association with the dom palm is inscribed on stela 289 from Deir el-Medineh and on an offering table (Turin 22029) where, in both examples, she is described as ‘Taweret of the dom palms’ (Bruyère 1952: 123, fig. 260, no. 289; Habachi 1977: 34).

3-8 Cultivation and domestication: oil and the development of two varieties of lettuce

The Egyptian oilseed lettuce L. Serriola var. oleifera is ‘...a primitive, wild-looking plant...’ that does not grow from a rosette of leaves or form a head (Fig. 3-20) (Boulos and el-Hadidi 1994: 72).

Bolting occurs early in the growth cycle and a thin stem with narrow, elongated leaves is produced. Its seeds are 50 per cent larger than those of cultivated edible plants (Ryder 2003: 375). L. serriola var. sativa grows semi-wild in modern Egypt and is cultivated for its edible heart and as a food for livestock but it, too, is primarily grown for its seed oil (Lindqvist 1960: 333, 336; el-Hadidi 1992: 324; Murray 2000: 632).

The absence of archaeobotanic evidence for lettuce before the Third Intermediate Period prevents the secure identification of lettuce as a source for oil and the complete oil processing sequence is not shown in tomb depictions to enable a deduction from this source. There are also the problems of plant identification in depictions and texts relating to extraction techniques and, as has been discussed in
1-2, translations are not always feasible or verifiable and must be based on interpretation (Serpico and White 2000: 390-391).

Fig. 3-20
*Lactuca Serriola* var. *oleifera*
Dokki Agricultural Museum Herbarium, Cairo, 2860
(Norris 2013)

It appears that lettuce may have been domesticated initially for its oil which was extracted from the seeds to be used in cooking and medicine (Wilkinson 1878: II,
398, 400; Keimer 1924a and 1924b). It is known that lettuce was grown for cooking oil in Upper Egypt in the early twentieth century (Lucas 1962: 332-333) and an oil press is known to have been processing lettuce seed in Esna in 1967 (Knowles 1967: 161, figs.10, 11). Ryder (2003: 375) also confirms that the pressing of oil seed in Egypt still continues in the twenty-first century. There is little evidence to indicate how oil was extracted and processed in ancient Egypt. It has been inferred from Egyptian depictions of perfume making that the method of extraction for high quality oil was to sprinkle the seeds on water, bring to the boil and then skim off the oil. Lower grade oil was extracted by sprinkling with salt and cold pressing with a mortar and pestle or by a bag press (Serpico and White 2000: 405-407).

Until selective breeding for eating qualities was practised, the bitterness of the lettuce probably rendered it inedible by humans. The wild form of oil producing lettuce, L. serriola var. sativa still has a bitter taste and prickly leaves and is fed to livestock (Harlan 1986a: 7) but domesticated lettuce on the other hand, has had the trait for prickles bred out and once this trait was eradicated the lettuce leaves could be consumed without the need for any processing. Like many species in the Compositae family, species of the genus Lactuca produce bitter tasting latex containing lactucin and luctucopicrin. This bitter taste protects the plant against herbivorous insects such as locusts, larger grazing herbivores and humans (Rees and Harborne 1985: 2225-2231; Agrawal and Konno 2009: 324-325).

A consequence of the dispersal of the plant from the cooler climates of the hilly regions to the north and east of Egypt down to the warmer Nile Valley may have been an initial change to the morphology and an initial increase in the bitter tasting latex. The lower altitude and higher temperatures, above 20°C in Middle Egypt, would have prevented head formation, encouraged bolting\(^\text{27}\) and the increase in the latex (RHS 1992: 53) even though lettuce was grown in the relatively cool, autumn season to avoid the inundation (Harlan 1992: 181).

If members of the Compositae that produce ‘physical deterrents’, such as bitter latex and prickly leaves in the case of the wild lettuce, were initially domesticated

\(^{27}\) Bolting and absence of head formation were noted in plants grown by the author which were subjected to unusually high temperatures of up to 30 °c (See Appendix 5).
as an oil seed crop and not for consumption, the plant would, nevertheless, still have been protected by humans from the predation of herbivores (Dempewolf et al. 2008: 1149, 1151). This protection from damage would have naturally reduced the need for the secondary compounds of latex and prickly leaves that make the plant inedible, a point discussed by de Vries (1997: 171-172). Once the spines had been reduced or eliminated naturally as a result of human protection, the plants would be less hazardous to work with or consume and therefore be easier to cultivate and domesticate for their food properties. (The nutritional components of lettuce are discussed further in Chapter V in connection with the perceived and evident benefits of the plant to sexual performance). A further consequence of eliminating the spines and bitterness was a concomitant reduction in the amount of latex produced (de Vries 1997: 171-172) but any such reduction does not appear to have affected the significance of the lettuce for the ancient Egyptians.

If, therefore, the lettuce was initially selectively bred for oil production it would have been selected for properties that were unconnected with latex exudation and a perceived aphrodisiac effect. This implies that a connection between the lettuce, semen and Min had not yet taken place when the plant was first selectively cultivated. The initial early domesticate may have been selected and cultivated first for oil production and then a second variety was developed for consumption following the eradication of the spines and bitter taste.

Early adaptations to the morphology brought about by this change of emphasis in use may explain the variations in two depictions in the sanctuary of the mortuary temple of Pepi II (Jéquier 1938: pl. 95). There appears to be two varieties of lettuce as indicated by arrows in figure 3-21a: on the left a lettuce with spines and a thick mid-rib down its leaves (type L3b) and on the right, a Cos-type of lettuce with no apparent mid-rib or spines (type L3a) and in 3-21b: type L3a is the top plant and L3b is depicted below and partially on the right of the figure.

The same two types of lettuce are repeated in further reliefs in the same corridor and again in the south corridor (Jequier 1938: pl. 94, 62).
The two types of lettuce occur again in the Fifth Dynasty tombs at Saqqara of Ptahhetep and his son Akhketep and in the tomb of Ptahhetep II (Fig. 3-19a and b). In both instances, lettuce is not named in the inscriptions but is presumably included as a ‘vegetable’ or ‘produce’ (Murray 1905: 13, 15-16, pl. IX, XII).
If, as the evidence in the iconography suggests, two varieties of lettuce were depicted, then with the techniques available at present it may be possible to trace whether two species were dispersed from their centre(s) of origin to Egypt or whether two varieties were developed through human intervention very early in Egyptian pre-history, one for oil production and one for consumption. A third explanation for the disparity in the iconography may be that only one species is depicted and the variations are artistic licence, although this appears unlikely due to the variations having persisted through time and at different locations throughout Egypt (Keimer 1924a: 121-126, 167).

The plant scientist Ryder speculated that the plants, (which he was careful to specify as having been identified as lettuces by scholars), that the Egyptians selected from the original oil producing varieties were specimens that were slow to bolt and which were less bitter and therefore edible. These slow bolting plants developed a thick stem with broader leaves than the original wild lettuce and these may be the lettuce depicted in Old Kingdom tombs, although Ryder refers to them as Middle Kingdom tombs (1999: 17-18). As the plant stem grows and begins to bolt, the bunched leaves at the top of the stalk change from green to bluish-green, which might explain the ‘blue’ lettuce remarked upon by Harlan (1986: 4) and which was noted in modern Cos lettuce grown by the author in 2014.

Ryder went on to postulate that, from this Egyptian variety, a lettuce with a short stem and broad leaves ultimately developed that was more attractive for human consumption. This became the Cos or Romaine cultivar (L. sativa var. longifolia) which dispersed around the Mediterranean and Middle East and subsequently spread world-wide. In time, the thick stemmed variety dispersed to China to become the ancestor of the thick stemmed variety L. sativa var. aspargina, augustana or angustata, cultivated there today for its stem (Ryder 2003: 375).

3-9 Latex and semen
Palaeographic evidence, together with the ancient Egyptians’ experience of dealing with farm livestock, indicates that the Egyptians possessed a considerable knowledge of male physiology, anatomy and the relationship of semen to conception and fertility predating the development of hieroglyphic writing (Ghalioungui 1973: 110-111; Nunn: 1996: 52-54; P. Ebers 854 i).
The hieroglyphs (Gardiner sign D52) and (D53) are not attested until the reign of Netjerikhet (Djoser) in the Third Dynasty (Regulski 2010: 101) and in hieratic forms in the Fifth and Sixth Dynasties (Fig. 3-23).

Fig. 3-23. Hieratic equivalents of Gardiner signs D52 and 53. (Adapted from Möller 1927: 95, 96).

During the Old Kingdom the two signs had separate and distinct meanings: but in the New Kingdom, specifically in hieroglyphic writing, the signs became interchangeable (Lacau 1912: 69-80).

represented the actual organ, male, husband.

represented semen, urine, and associated actions.

The firm, upright shape and vigorous growth pattern of the lettuce may also have suggested an association with the reproductive act (Darby et al. 1977: II, 678; Shokeir and Hussein 2004: 388). Sourdive has suggested that there is a parallel here with the depiction of corn sprouting from a recumbant Osiris with an erect phallus (1984: 411, n.10).

As the lettuce reaches its reproductive stage, the seed stalk lengthens upward and bears flowers. Plants grown by the author attained a height of 107 centimetres at this stage. In relation to the lettuce latex, the exudate would have been observed when the plant was harvested and the stems were cut or broken. The amount of latex is at its greatest and it is under pressure at this stage, so that when the stalk is broken or cut, the latex spurts forth in a manner similar to ejaculation (Ryder

Montet (1912: 186-190) expanded upon later variations.
2003: 378) although the latex observed in plants grown by the author (Fig. 3-24) was slow to exude and did not spurt. This may be due to the fact that the cultivar grown for the experiment was specifically bred for eating and consequently produced less latex than a wild plant.

![Image](image_url)

Fig. 3-24
*L. sativa* experimentally grown by the author to demonstrate latex exuding from a cut stem
(R. A. Norris 2013)

A characteristic of modern, commercial lettuce grown for consumption is that, in order to increase palatability, it contains less latex to become pressurised (see 3-6-3). A factor affecting the author’s experimental lettuces may have been location, which was higher than the Nile Valley and considerably cooler. These lettuces were cultivated at an elevation of app. 244 metres (800 feet) in an unheated polytunnel to give some protection for the susceptible plants from the variable, often wet and cold, conditions prevailing at the research location. These conditions may have reduced the plant’s propensity to produce pressurised latex (see Appendix 5).

More than a visual comparison of semen and latex could be involved here. The Egyptians could not have been unaware of the comparison of the physiological responses of rapid ejaculation and de-tumescence of the penis with the exudation, albeit at a slower rate, of latex from a damaged lettuce stem and the consequent limpness of that stem (Gregory pers. comm. 2012). These suggestions do not
appear to have been considered much in earlier literature, possibly on the grounds of propriety and social *mores*, although the spurting of latex from a cut flowering stalk of lettuce has been described as ‘reminiscent of ejaculation’ (Ryder 2003: 378).

However, every plant wilts if it is damaged but a plant containing latex will wilt less because the latex slows dehydration and there appears to be nothing special about lettuce in this respect (Kesseli 2013: pers. comm.). Nevertheless, perhaps the Egyptians with their acute observations of natural events connected the fact that the lettuce wilted more slowly and that by offering it to the god it might, therefore, prolong the erection of Min and thereby extend the time he was able to fertilise.

### 3.9.1 Collection and preparation of latex

Plant compounds can be more concentrated at specific times of the day or at certain stages of growth in a plant and also in different parts of the plant. The effects of environment, climate, diurnal and seasonal changes on the concentrations of active compounds in medicinal plants were recognized by Egyptian physicians and there was an element of ‘magic’ attached to the time of day and day of the month when a plant was gathered for use. This knowledge of when to harvest is still important for plant collectors in Graeco-Arab medicine today, a fact recognized in guidelines issued by the World Health Organization in 2003 (Saad and Said 2011: 489-492).

In Europe in the early twentieth-century, lettuce latex was collected by cutting off the stem tops and harvesting the solidified exudate but exactly how is not stated (Kraemer 1902: 649). At the end of the twentieth century, legally grown commercial opium was harvested by incising the poppy capsule and the congealed exudate was then scraped off by hand the following day (Fig. 3-25) (White 1985: 157). In current herbal medicine, stems are pounded or tapped and the extracted latex is added to alcohol as an anodyne (Chiej 1984: 166; 167; Barnes, Anderson and Phillipson 2007: 597).
Fig. 3-25
Opium poppy capsule with latex (opium) oozing from incisions.
(Adapted from Merlin 2003: 310, fig. 10)

3-9-2 Influence of the principle of *similia simulabes* on the association of lettuce and semen.

The resemblance of latex to semen was probably observed by the Egyptians and a connection made between lettuce and procreation (Germer 1980: 85-87). Whether or not this association predated the appearance of Min and was then linked with the god from the beginning of his cult, or whether it arose as a consequence of the introduction of Min is impossible to tell on the present available evidence.

The principle of *similia simulabes* appears to have arisen in many parts of the world at different periods. This principle predicts which plants or substances might be effective remedies for human conditions (Pearce 2007: 51). It employs sympathetic magic combined with autosuggestion and depends on two premises: firstly, the alleged resemblance of the morphology or attributes of a plant or part thereof or animal or part thereof to a human symptom or condition and secondly, because of that similarity the plant is believed to be therapeutic for treating that specific condition or symptom (Stannard 1982: 14). When using animal parts, a remedy might be concocted from part of the animal on the basis of characteristics possessed by that animal (Nunn 1996: 97). Following on from this principle, the concept of the ‘Doctrine of Signatures’ was promulgated by Böhme (1651) in the seventeenth century. It is a theory found world-wide (Bennett 2007: 246-248, 252), based on a pre-existing religious concept arising from *similia simulabes*, which held that God had given everything a ‘signature’ that indicated its purpose in creation (Pearce 2008: 51). This concept continued to be important until the
nineteenth century but is no longer part of mainstream medicine (Pearce 2008: 52) although it is still employed in folk medicine and Western homeopathic medicine (Dafni and Lev 2002: 333; Pearce 2008: 52).

Moerman (2002: 153-154) suggested that ‘signatures’ or ‘resemblances’ were also part of the placebo effect through enhancing the perceived effect of medicines, including aphrodisiacs. The significance to the patient lay in the resemblances described above which may render the ‘remedy’ more effective (Taberner 42-43, 56-7). This is evident in the identification through auto-suggestion, of many edible substances used in diverse cultures world-wide such as oysters and carrots. The morphology of the lettuce does not immediately suggest either a ‘resemblance’ or a ‘signature’ but its latex may have been considered by the Egyptians to resemble semen.

3-10 Evidence for lettuce elsewhere in the ancient and classical worlds

Mesopotamia is the only other early civilisation in which secure evidence exists for cultivated lettuce and its uses. Knowledge of the lettuce in Mesopotamia is based on a large number of cuneiform texts on clay tablets discovered in temple libraries and the Royal Library of Ashurbanipal at Nineveh, which are now preserved in the British Museum. The evidence in these texts commences much later than that from Egypt: the earliest is a list of ingredients for a feast given by King Ashur-Nasir-Apli II in the ninth century BC (Grayson 1972: 176), whereas Egyptian depictions are attested from c. 2400 BC. The most secure Mesopotamian evidence for lettuce can be found in eighth century BC lists on a clay tablet (BM 46226) of garden plants found in the garden of King Marduk-apla-iddina, the biblical Merodach Baladan (Thompson CuT XIV, 50; Leach 1982: 5; Zohary and Hopf 2001: 192). This records details of 67 plants of which only 26 could be securely identified (Leach 1982: 5). The lists were analysed by the Assyrian scholar Thompson (1924; 1949) and his publications remain the seminal works on the subject along with his translation of Assyrian Medical Texts (1923). Although Riddle (2010: 48) said that Thompson’s work is no longer definitive, Thompson had acknowledged that Assyrian plant identification was unreliable and that the details, like those of the Egyptian sources, are confounded by linguistic problems (1924: 6-7).
Thompson (1924: 87, 125; 1949: 65, 72-4) hypothesised on linguistic grounds that two types of lettuce were recorded: a small, cabbage variety (unlike the upright Cos) and *L. virosa*, although the British Museum entry for BM 46226 states that possibly three varieties are listed in column three. Thompson emphasised an Assyrian observation about the bad smell of *L. virosa* and believed that it may have been confused with Fenugreek (*Trigonella foenum-graecum*) (1924: 87; 1949: 6, 73) but the RHS (1992: III, 4) confirms that a foetid smell is associated with the root of *L. virosa*. Apart from consumption, the lettuce was used in Assyrian medicine as an astringent, for staunching blood, as an ointment with cumin for a ‘sick’ eye and in poultices (Thompson 1924: 125; 1949: 73). Whilst it is known that lettuce was grown in Mesopotamia there appears to be no reference in the Assyrian literature to lettuce being used as an aphrodisiac but Brothwell & Brothwell (1998: 121) made an unsubstantiated claim that the Assyrians believed in the aphrodisiac properties of the plant.

For further information about the varieties and uses of lettuce in antiquity it is necessary to refer to Greek and Roman sources. Theophrastus (vii.ii.ix.) described the varieties of lettuce known to the Greeks but did not mention their use in medicinal remedies. Dioscorides (II: 165, 166), however, wrote about two varieties of lettuce: Thridax Emeros (*L. sativa*), which he said the Egyptians called ‘*Embrosi*’, and the wild lettuce Thridax Agria, *L. serriola*. Thridax Emeros relieved stomach problems and when boiled, ‘...it increases nutrition.’ (Riddle 1985: 27) but it is not clear if an appetiser is meant or that it was a source of beneficial food properties. Thridax Emeros was also used as a sedative, a laxative and as a stimulant to lactation and the seeds were mixed in a drink as an anaphrodisiac, but if taken too often this could cause blurred vision (Dioscorides II: 165, 166) which it is now known to be caused by a tropane alkaloid in the seeds. If allowed to bolt, as with all *L. sativa*, this species reverted to the wild type and produced latex in the same way as *L. serriola*. Thridax Agria, the wild lettuce *L. serriola*, was taller with paler leaves and a bitter taste. It was used as an analgesic and as an antidote for scorpion bites, for which it is still used in Egypt today (Boulos and el-Hadidi 1994: 72). Its seeds and latex, although considered weaker than those of Thridax Emeros, were also drunk as an anaphrodisiac. Dioscorides observed that the effect of lettuce latex was like that of the opium
poppy, pre-empting the experiments of Duncan and Coxe to produce an opium substitute seventeen hundred years later (Riddle 1985: 38).

Lettuce had its place in Greek mythology and philosophy. Athénée de Naucratis (Athenaeus) discussed the allegorical use of lettuce to describe the suppression of the libido (1956: II. 69a, c). The allegory is based on versions of the myth of Adonis who was either killed in a lettuce bed by a wild boar or had been hidden in a lettuce bed by his mistress. At his death, Adonis was laid out in a lettuce bed by Aphrodite and the image of Adonis hiding or laid out in the lettuce bed is allegorical for the impotence caused by the continual consumption of lettuce. This was, by association, linked with death because death was considered to be the ultimate impotence.

A second link with death was the nature of lettuce: it was regarded as a cold, wet plant which was allied with death, sterility and decay (Detienne 1977: 66-68). The Pythagorean sect used lettuce as an anaphrodisiac as part of their philosophy of renouncing the pleasures of life. One variety of lettuce was named ‘eunychion’ because of its anaphrodisiac effect and this was specifically recommended for eating in the hot season to quell sexual desire in men (Detienne 1977: 123-126).

Lettuce produced sedative or narcotic effects, had a diuretic effect, and was used as an ingredient of eye ointment, or as a stimulant of the appetite or, most relevant to this thesis, as an anaphrodisiac (Pliny NH 19: 38; 20:26; 20:27; 26: 63). However, as Jashemski points out, Pliny is unreliable in some of his identifications because many of his examples are not Lactuca species (Jashemski 1999: 60), ‘Goat’s lettuce’ which, according to Pliny, could kill fish if dropped into the sea, relieved dropsy and strains and prevented tooth decay, was probably not a lettuce but Euphorbia lathyris (Bostock & Riley 1856: 228). Pliny also referred to the neutralising effect of lettuce upon a variety of ‘Satyrion’ which had sexually stimulating properties that the consumption of lettuce was able to counteract (Pliny 26: 62-63).

Martial (xiii.xiv.) questioned why the eating of lettuce, which took place at the end of a meal in the days of his ancestors, was consumed in his time at the start of a meal. He had already given the answer earlier in his own writings (xi.l.li.v)
saying that the lettuce was previously consumed as a laxative but was now eaten as an appetiser (v.lxxviii.v).

3-11 Summary

It is now almost certain that L. sativa L. var. longifolia derives from one form of L. serriola plus another, as yet unidentified species. However, the identity of the plant speculatively identified as a species of lettuce in the ancient Egyptian iconography has not yet been irrefutably established as a lettuce despite modern technology. It is possible that 3bw may not be the Egyptian word for lettuce, and the whole premise is based on the identification of one plant by a mid-twentieth century German biologist. This conundrum can only be solved by the discovery and identification of primary evidence in the form of preserved plants.

It is probable that lettuce was first domesticated for cooking oil and then evolved into a food plant either through human intervention or by natural selection and that at least two species may have been present in Egypt from at least the Fourth Dynasty: possibly L. sativa and L. virosa. Evidence for the presence of L. virosa in ancient Upper Egypt is beginning to accrue as Aufrère has shown.

Although the lettuce was depicted in tombs to ensure food and possibly oil for the deceased and his kȝ in the afterlife, and as a symbol of regeneration, there is no indication that it was there as an aphrodisiac. It is possible that the Egyptians perceived this as something understood but, with the evidence at present available, the lettuce seems to have been connected with concepts of regeneration in the tomb depictions before it became one of the attributes of Min in the iconography.

Whilst there is evidence for use of lettuce in remedies for a number of ailments in Egypt and other cultures, it is apparent that the opposite effect of an anaphrodisiac, possibly because of the diuretic and sedative properties of the plant, was associated with lettuce outside Egypt. Conversely, the sedative properties of lettuce may have had a relaxing effect which facilitated sexual activity but this calming effect is employed in modern alternative forms of medicine as a sedative and cough suppressant. The anaphrodisiac and sedative properties of Lactuca species will be returned to in Chapter 5.
CHAPTER 4

SOME OBSERVATIONS ON THE DEPICTION OF THE LETTUCE

4-1 Introduction

The bulk of evidence for L. sativa in Egypt is found in the iconography and, to a lesser extent, in texts. Some of the botanical changes in the morphology of the plant have already been discussed in Chapter 3. In addition to historical problems both linguistic and visual when identifying the lettuce, how the plant was depicted in the iconography changed through the dynasties.

This chapter examines how the plant was depicted from the Old Kingdom to the Roman Period, expanding upon the categorisation of types of lettuce devised by Keimer as in figure 3-8. This revised list of categories can be found in Appendix 1. The act of offering the lettuce will be considered in chapter 6. Following the introduction and a case study about some of the problems of interpretation, the chapter is divided into two parts: in 4-3 the lettuce in two-dimensional art is examined and in 4-4 the limited amount of evidence for lettuce in three-dimensional form is discussed.

With so many examples being of unknown provenance, dating can be difficult, if not impossible, and sometimes can only be the result of comparison and educated guesswork. Depictions can be influenced not only by the original artist’s skill and perception but by the abilities of modern copyists and the quality of modern colouring techniques. The plant can also be confused with other damaged, badly crafted or poorly copied renderings. It is frequently hard to judge the size of some of the plants because of the lack of perspective, artistic licence when filling spaces and the requirement of Egyptian funerary art to depict an ideal rather than the actual.

Identification of lettuce in a group of offerings can be subjective, as evidenced in the Eleventh Dynasty commemorative stela of the nomarch šsn-nfrḥt from Naga ed-Deir (Fig. 4-1) (Toledo Museum of Art 1947.61). Still retaining much of the original stucco and paint, in the lower register are depicted two crudely executed green plants with brown stems (identified by blue arrows), which are described as lotus buds (Peck, Knudsen and Reich 2011: 42-43, Stele of Zezen-nakht (sic):
(2014). When compared with the lotus plants arrowed in black, from their shape and colouration they are more like lettuce type L4 (K2). A further comparison with the lotus buds in figure 4-2 emphasizes the discrepancies, particularly the thickness of the stems and overall shape, but it should be noted that this latter figure is a more refined Twentieth Dynasty painting from Medinet Habu.

Fig. 4-1
Early Eleventh Dynasty stela of Zezen-nakht, Naga ed-Deir.
© Toledo Museum of Art 1947.6
Lettuce plants (blue arrows) that are described as lotus buds (black arrow).

Fig. 4-2.
Lotus buds: detail of wall painting, second court, east wall, Medinet Habu.

(Epigraphic Survey 1940: pls. 207, 208)
4-2 Case study

Some of the problems involved in interpreting artefacts are illustrated by the following case study of a small faience object discovered by Petrie at Coptos in the Ptolemaic foundation deposits of the Temple of Min. This artefact was described by Petrie as the lower part of a plant or ‘palm spathe?’ similar to ones that were depicted behind Min and which he claimed ‘...doubtless came from the the fittings of a statue of Min.’ (1896: 18-19, 24).

Adams believed that this artefact appeared to be a votive lettuce model, an opinion she based on a comparison with depictions of Ptolemaic and Roman depictions of lettuce, and that this may be the only three-dimensional representation of a lettuce (1980: 9-15). The object is now in the Petrie Museum (UC 34696) (Fig. 4-3) and it was subjected to X-ray fluorescence analyses under the identification of ‘green model lettuce’. It was subsequently dated to the Ptolemaic-Roman Period, which fitted with Petrie’s find spot and Adam’s lettuce identification (Kaczmarczyk and Hedges 1983: App. B7, App. C 320-116-699).

The arrangement of the leaves around the base of the artefact could resemble that of an early lettuce as depicted in plants behind Min on the New Kingdom votive stela UC 14601 (Fig. 4-4). However, this appears unlikely when the following is considered: if the image of UC 34696 is rotated through 90 degrees and compared with the examples of papyrus-shaped amulets in figure 4-5, it replicates the lower part of a papyrus column or sceptre amulet, particularly CGC 5397.

Fig. 4-3.
UC34696. Petrie Museum of Egyptian Archaeology.
© University College, London 2013.
Fig. 4-4.
Arrangement of leaves at base of the lettuce stem UC 14601.
Petrie Museum of Egyptian Archaeology.
© University College London 2013

Fig. 4-5.
Papyrus column amulets compared with Adams’ ‘lettuce model’.
CGC 5394, 5397, 5398, 5490; UC 34696
(Reisner 1907: pl. II) (UC 34696 as before)

Faience $\text{wḏt}$ (papyrus) amulets range in colour from bright light blue (CGC 5394) to pale bluish green (CGC 5397). They were offered to the cobra goddess $\text{wḏt}$, the protective deity of Lower Egypt since the Pre-Dynastic and who, along with $\text{Nḥb}t\text{et}$ of Upper Egypt, was associated with the kingship in the $\text{nbty}$ name of the king (Gardiner 1957: 73; Wilkinson 2003: 226-227). In return for the offering, $\text{wḏt}$ also protected the new king who represented the new Horus on earth (Wilkinson 2003: 227). A votive offering to a goddess who protected a new king would be an appropriate artefact for a foundation deposit.
*Wa*ḏ, meaning the green one, possibly referred to the colour of the reptile but also symbolised the green vegetation of the Delta where the goddess had protected the young Horus. *Wa*ḏ also has the meaning of be green, fresh or well and the papyrus plant was a living, green symbol of health and freshness. In connection with offerings it meant ‘prosper’ in the sense that altars received an abundant supply of offerings and in the phrase ‘make thrive’ Hathor makes the Two Lands green and fertile with a papyrus sceptre (Wilson 1997: 201).

Furthermore, the ‘green faience lettuce model’ does not resemble either the amulets said to represent lettuce discovered by Brunton in the foundation deposits of the Ramesses II temple of Seth at Matmar (Fig. 4-6), now in Museum August Kestner, Berlin (Kat. 258-260), or three very similar amulets from the collection of Bissing in the same museum (Kat. 255-257; Bissing 1949.331).

![Fig. 4-6.](image)

*Fig. 4-6.  
‘Lettuce’ amulets from the foundation deposits of the Ramesses II temple of Seth, Matmar. 
(Brunton 1948: pl. xlvii, 49 and 63).*

Interestingly, Petrie himself had discovered a similar ‘lettuce’ amulet at Tell el-Amarna which he lists as part of a collection of ‘moulds for fruits and flowers’. (Petrie 1894: 30, pl. XIX 469, m61).

![Fig. 4-7.](image)

*Fig. 4-7.  
Petrie’s ‘lettuce’ amulet from Tell el-Amarna. 
(Adapted from Petrie 1894: pl. XIX).*

Notwithstanding, the conclusion reached is that Petrie’s artefact identified by Adams as a three-dimensional lettuce is probably a damaged *Wa*ḏ amulet and not a palm spathe or a lettuce.
4-3 Lettuce in two-dimensional representations.

4-3-1 Old Kingdom: lettuce type L1.

Fig. 4-8.
Type L1, Fifth or Sixth Dynasty tomb of Niankhnesut, Saqqara.
Ägyptisches Museum, Berlin Inv. 3/65.

All the known depictions of type L1 are listed with references in 3-2, Table 1; they are all of lettuce growing in gardens and this type continued to be depicted into the Middle Kingdom. Keimer did not include this type in his list.

A few lettuces of type L1 continued to be depicted in New Kingdom garden scenes as in the tomb of Nakht (TT 161) (PM: p. 274, Map II D6, d, 3; Manniche 1989: 17) (Fig. 3-12) and whilst type L1 is not often depicted with Min on stelae, a single plant can be seen on the ḫsp behind Min on the crudely executed stela of sḥḥy and ḫwy. This stela is of unknown provenance but has been dated to the end of the New Kingdom (Louvre inv. 3649, Département des Antiquités; Gabolde 2000: 80, cat. 46) (Fig. 4-9).
4-3-2 Lettuce L2a and 2b depicted with Min from the Old Kingdom onwards

Although it existed in parallel with L1 during the Old Kingdom, the tall lettuce with long, lanceolate leaves that is depicted behind Min (types L2a and 2b) was not listed by Keimer. L2a has no markings shown on its leaves whilst L2b displays a broad mid-rib. They are often equal in height to the god or taller and have tightly bunched leaves, which may or may not be indicated within the outline. In comparison, type L1 plants are much shorter and the leaves are not bunched so tightly together and any number of these plants can be depicted on the ħsp. L2a, L2b and other, later, types are usually portrayed in groups of three, five or nine plants: the majority of depictions being of three lettuces but in the Nubian temple of Ramesses II at Derr, only two are shown (Blackman 1913: 45, pl. XXXIII; Gauthier 1931a: 172).

These numbers may have no significance or they could be interpreted as representing duality (2) as in Upper and Lower Egypt, plurality (3) meaning many lettuces as in depictions of L1 or a great number or multitude of lettuces (9 being 3 times 3) (Wilkinson 1994: 126-137). This does not, of course, explain the use of the number five. It is reasonable to infer that the numbers 3, 5 and 9 are symbolic of ‘many’ lettuces growing behind Min as they are in depictions of L1 in a garden.
Fig. 4-10a and 10b.
Type L2b lettuces.
Chapel of Senusret I, Karnak.
(Adapted from Lacau and Chevrier 1956: pl. 20 scene 17; pl. 21 scene 19).

Three reasons are suggested for the variation between L1 and L2:
Two different varieties of lettuce may be depicted
In the case of L1, lettuce for consumption is harvested before it has reached the elongated, reproductive stage.
Types 2a and 2b may be types of L1 that have reached the reproductive stage.
In the Old Kingdom, Min was prominent as Lord of the Eastern Desert and the protector of travellers. L2a and 2b may be stylised renderings of the tall, wild lettuce found in Middle Egypt and could allude to Min and his origins and rule in desert places.

**4-3-3 Type L3a and L3b**

These two types are basically the same as L1 but are not depicted growing in garden plots. L3a has no mid-rib indicated whilst L3b shows a definite mid-rib (Figs. 4-11a and b).

![Fig. 4-11a. L3a in a presentation of offerings scene. North wall of the Fifth Dynasty tomb of Usr-nfr, Saqqara. (Adapted from Murray 1905: pl. XXI).](image1)

![Fig. 4-11b. Type L3b, presentation of offerings scene. Chamber C, south wall, Fifth Dynasty tomb of Ptahhetep, Saqqara. (Adapted from Murray 1905: pl. IX).](image2)

**4-3-4 Type L4**

Type L4 is a shorter, rounder plant with rounded leaf-ends that was listed by Keimer as varieties K2-4. Both L4a and b were frequently depicted in funerary contexts and their representation was so consistent they could almost be referred

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to as standard motifs in the Old Kingdom and First Intermediate Period (Fig. 4-12).

**Fig. 4-12.**
Type L4.
Sixth Dynasty mastaba of Gem-ni-kai (Kagemni).
Saqqara necropolis, around the Teti pyramid, LS1,
Door to chamber 2, wall A.
(Bissing 1905: vol. 1, pl. XXIV).
(PM III², p. 524 Rm. V).

**4-3-5 Middle Kingdom: type L5**

A large number of stelae with a variety of new depictions of lettuce were produced in the Middle Kingdom from the reign of Senusret III onward, when the material culture of Egypt changed for the better in a period of political stability (Grajetzki 2001:1).

In the Eleventh Dynasty reign of Mentuhotep II, type L5 (K8, 10) appears on a limestone sarcophagus found at Deir el-Bahari (Fig. 4-13) (Egyptian Museum Cairo JE 47267) (PM II, p113) (Winlock 1942: 37, pls. 6-10; Saleh and Sourouzian 1987: 69a). This is a sophisticated, well-executed depiction that is very different from other Twelfth Dynasty types L6, 8a and b. Markings on this leaf are not clearly visible in Winlock’s publication, but a comparison with the
same sarcophagus shown in Saleh and Sourouzian (1987: fig. 69a) clearly shows the markings which are very similar to those of figs. 40-50 and 4-51 in this thesis. Type L5 is often confused with lettuces that are said to be palm leaves and this discussion is developed in 4-4.

![Fig. 4-13](image)

**Fig. 4-13**

*Detail from the sarcophagus of Ashait (Cairo JE 47267). Deir el-Bahri, reign of Mentuhotep II. Lettuce type 5 is arrowed in black.*

*(Winlock 1942: pl. 8)*

4-3-6 Types L6 and L7

Two rudimentary outline versions with leaves of a ragged appearance came into use in the Twelfth Dynasty, types L6 and L7a. These styles appeared on many stelae of the period: L7a for example, appears on the unfinished Twelfth Dynasty stela of *Usr-.wr* which was probably from Abydos (Fig. 5-5 below) (Bourriau 1988: 29-31; Strudwick 2006: 86-87) and in the tombs of some of the nomarchs at Beni Hasan.

Of the 39 tombs described by Newberry at Beni Hasan, only 12 were inscribed and of these, three: T2 Amenemhet, T3 Khnumhotep and T23 Netennekht, have depictions of lettuce of the types L6 and L7a (K6 and 7). L7 is depicted in a scene of lettuce cultivation (Table 3-3) in the tomb of Khnumhotep, and L6 and L7...
appear together on offering tables before the deceased and their wives in T2 and 3. Given the lack of perspective in Egyptian art, the lettuces depicted on the offering tables appear to be in an innovative arrangement, seemingly side by side, often in pairs (Fig. 4-14) (Newberry 1893:1, pl. X).29

![Fig. 4-14](image)

**Fig. 4-14,**
Types L7a and L6 on the offering table in front of Neternekht, Administrator of the Eastern Desert.
East wall, right hand side, Beni Hasan tomb 23.
(Adapted from Newberry 1893: pl. XXIV).

Type L7b, figure 4-15, is a refined version of type L7a.

![Fig. 4-15](image)

**Fig. 4-15.**
Type L7b. Detail of the stela of Sensebek.
Twelfth Dynasty.
BM EA 580
© Trustees of the British Museum

29 See also pls. XI, XII, XVII, XVIII, XIX, XX, XXV and 1893:2 pl. XXIV.
4-3-7 Type L8

An unusual variation, type L8, is depicted in the Twelfth Dynasty tomb of Sarenput II at Aswan and has a spikey or ragged appearance (Fig. 4-16a and b).

Fig. 4-16a and b.
Tomb of Sarenput II, nomarch of Aswan.
Reign of Amenemhat II, Twelfth Dynasty
Fig. 4-16a Rear wall of innermost chamber
Fig. 4-16b Close-up of the lettuce on the offering table
(Taylor 2015)

4-3-8 Type L9: Keimer’s images bracketed as number 25

Keimer dated these five representations of lettuce to the Middle Kingdom. Whilst four of the types may represent lettuce and are not disputed, a fifth example when compared with a sceptre from the frieze on the Middle Kingdom coffin of Sebek-O (Fig. 4-17a and b) does not appear to be a plant but another form of sceptre of authority as in Gardiner sign S42.

Fig. 4-17a.  Fig. 4-17b.

Compare the fourth image from the left with the image from the frieze on the coffin of Sebek-O.
(Keimer 1931a: 167; Steindorff: 1901: detail of Tafel II).
4-3-9 Transitional stage in the Eighteenth Dynasty

From the Eighteenth Dynasty onwards, there was a major change in the way the lettuce was depicted either with or without Min, together with a greater tendency to stylisation away from the realistic representations of L1-4; plants with stylised prickles or spines also increase in frequency and variation. From the Eighteenth Dynasty the king now offered two lettuces, one in each hand (Gauthier 1931a: 166) which may have resulted from a relaxation in decorum (Baines 1990b: 21) or been symbolic of the duality of Upper and Lower Egypt. These changes are best noted at Deir el-Bahri where a garden had been established in front of Hatshepsut’s mortuary temple to provide lettuce for the offerings to Amun-Min (Fig. 4-18) (Naville 1906: pl. CXLII).

![Fig. 4-18. Detail of the garden at Hatshepsut’s mortuary temple, Deir el-Bahri. Type L2 growing on a hsp. (Adapted from Naville 1906: pl. CXLII).](image)

Although small images of L2 were still produced as in figure 4-4, which has been dated to the Eighteenth or Nineteenth Dynasty (Stewart 1976: 41, pl. 32.5), the Deir el-Bahri representations in the mortuary temples of Hatshepsut and Thutmos III formed a transitional phase of Egyptian iconography as they were considered to be the last major realistic depictions of lettuce. In particular, figure 4-18, a painting by Howard Carter, was singled out by Gauthier as epitomising the characteristics of the lettuce (Fig. 4-18, 4-19, 4-20) (Gauthier 1931a: 163, 168).
Fig. 4-19.
Deir el-Bahari, niche in the chapel of Tuthmose I, north wall.
Offerings presented to Anubis, Type L2 (K5).
(Adapted from Naville 1895: pl. XV).

Fig. 4-20.
Close-up of an offering table before Amun-Re with type L2 (K5) lettuce.
Sandstone, raised relief block. Temple of
Tuthmose III, Deir el-Bahari.
Bolton Museum 1906.144.01.
© Bolton Library
and Museum
Service 2012.
During the Eighteenth Dynasty, the outline of the lettuce standardises into a club-shape, either in outline or with leaves depicted (L10a). Early examples of this club-shape are carved on all four sides of the barque socle in the vestibule of the Barque Chapel of Hatshepsut at Karnak. Similar friezes are carved on the plinth and socle in the sanctuary (Fig. 4-21, 4-22) (Burgos and Larché 2006: 297-303).

**Fig. 4-21**
East face of the socle on which the barque rested, showing the lettuces on *hsp* carved on each face.
Vestibule of the Barque Chapel of Hatshepsut, Open Air Museum, Karnak.
(© Taylor 2014)

**Fig. 4-22**
West face of the barque socle as in fig. 19, with lettuce and the cartouches of Hatshepsut.
(© Taylor 2014)
From the reign of Amenhotep III, at Luxor and later at Karnak, the tall L2 types seem to have been discarded and the garden was shown separately from the images of Min. The $hsp$ evolved into a portable altar or reposoir, carried on poles by priests (Fig. 4-23) in parallel with a stylised form of a naos (4-24) (Gauthier 1931a: 168-172).

![Image](image-url)

**Fig. 4-23.**
Philip Arrhidaeus offers lettuces to the processional statue of Amun on a carrying-shrine or reposoir. Granite sanctuary, or bark shrine, Karnak (PM II$^2$ 99, 287). (Taylor 2014)

![Images](image-url)

**Fig. 4-24.**
By the mid-Eighteenth Dynasty, the $hsp$ was evolving into a stylised naos. (Left: Gauthier 1931a: 170; Right: Leblanc & El-Said Ismaïl 1988: pl. 74).
A further modification occurred in the offering of lettuce in the Eighteenth Dynasty. From now on, the offering by the king of a lettuce in each hand became the norm, virtually replacing the offering of a single plant in temple scenes and rock depictions of Min, Amun-Min, Min-\(k3\text{-}mwt.f\), and Amun-Min \(k3\text{-}mwt.f\) (Gauthier 1931a: 166).

Following the Amarna Period, lettuce depictions continue to vary but within an overall basic shape L10. At the end of the Eighteenth Dynasty, during the reign of Horemheb, a modified version appears of two tall, pointed lettuces with marks at the joint of the stem and plant (Fig. 4-25)

Fig. 4-25.
Type L10a Chapel of Horemheb, Silsila.
(Taylor 2015)
4-3-10 Club-shaped prickly lettuce: type L10b
With the inception of the Ramesside period, scenes of offering of lettuce by the king to Min and lettuce with depictions of Min, which were not in evidence under Amenhotep IV/Akhenaten, continue to evolve. Depictions of prickly lettuce became more frequent and continued in the Ptolemaic Period (Fig. 4-26, 4-27).

Fig. 4-26. Ramesses III offers lotus to Min k3-mwt.f.
Two prickly lettuce surmount the naos-style hsp behind Min, Medinet Habu.
(Taylor 2014)

Fig. 4-27. Plain lettuce L10a (left) compared with prickly lettuce L10b (right).
(Norris 2014)
4-3-11 Ramesside Period: type L11

A unique form of lettuce appears in a number of depictions dated to the reign of Ramesses II. The first example is the Qudshu triad stela of Qeh (figure 2-20) which bears the image of two lettuce plants, the tops of which are bent over and point toward Min (type L11).

This does not appear to be an artistic ploy to fit an overlarge lettuce into the available space because a similar type of lettuce is depicted on Bankes stela number 9, part of a collection of stelae from Deir el-Medineh kept at Kingston Lacy, a country house owned by the National Trust in Dorset in the United Kingdom. This is another Nineteenth Dynasty stela, dated by the presence of a cartouche of Ramesses II in the top register. It belonged to a blind woman, *Ii-Nfrti*, who was buried with her husband Sennedjem in TT 1. Here, both plants bend toward the goddesses Mut and Hathor (Mahmoud 1999: 317, pl. 51) (Fig. 4-28) and exhibit a ‘trumpet’-shaped tip to the plants which could represent a flowering head at the peak of its flowering.

![Bankes stela 9.](image)

**Fig. 4-28.**
Bankes stela 9.
Two lettuces of type L11 with trumpet shaped tips are shown under the stylized offering table.
(Mahmoud 1999: pl. 51)
A third example is depicted in the Nineteenth Dynasty tomb of Nefertari, wife of Ramesses II (Fig. 4-29). The single lettuce under the offering table bends towards the deceased queen and it seems unlikely that the basic drafting error of allowing insufficient space to accommodate the plant painting would have been countenanced in such a high-status location.

Fig. 4-29.
Type L11 lettuce under an offering table before Hathor.
Tomb of Queen Nefertari.
(Desroches-Noblecourt 1966: pl. 20).

This ‘trumpet’ shape appears again in a cruder form on two šb ikr n R stelae, both believed to be from Deir el Medineh which are dated to the first half of the Nineteenth Dynasty (Fig. 4-30a and 4-30b) (Louvre Museum E 16369; Cairo Egyptian Museum 1/3/25/1=SR 13971). On the Louvre stela, the right hand lettuce bends away from the dedicatee B ʾki and on the Cairo stela it bends towards the dedicatee, R-m. In a detailed study of these stelae, the depiction of the lettuce is noted but no comment is made about the unique trumpet shaped tips of these two examples (Demarée 1983: 29-30; 80-82).
The fact that this type of lettuce occurs only in the reign of the deified Ramesses II, and assuming that all the stelae have a provenance connected with Deir el-Medineh, suggests that type L11 was unique to artists at that site and may have an, as yet unknown, connection with the deified Ramesses II. However, although lettuce type 11 does not appear at any other time or location, other plants, such as lotus, are depicted exhibiting this behaviour before Min and other gods. At Hibis temple in the Twenty-seventh Dynasty, for example, lotus plants in front of Min and other gods bend toward the deities in many of the reliefs but no comment is made about this in the text (Fig. 4-31) (Davies 1938-1953: pls. 7, 63, 69).

The plants may be responding to phototropicism or have reached the flowering stage and the heads are drooping with the weight of the inflorescence: both reactions were observed in specimens grown by the author in 2014.

It has been suggested that, where the flower is depicted as a symbol of rebirth or creation, it is understood to be growing upright in its natural habitat of water with the flower floating on the surface and the long stem growing up through the water. As an offering, the flower is depicted with the head drooping to one side under its own weight (Wilkinson 1992: 121). An alternative suggestion is that the plants could be lying on the floor as they appear to be unsupported.

Type L11 has not been identified in any other period, it was not listed by Keimer and it does not appear to have been discussed in the literature. They do not appear to be badly executed ḫṣr jars because such a jar is depicted beside a bent-over lettuce in the tomb of Nefertari (Fig. 4-29) but Demarée does describe both plants.
under the altar on stela A7 as ‘wine jars’ (1983: 29-30, pl. III) when the left hand
depiction is a conventional lettuce plant.

Fig. 4-31.
Three examples of lotus bending toward Min and other deities. North
jamb of the inner gateway, exterior jambs of the east face, Hibis
temple.
(Adapted from Davies 1938-1953: pl. 57).

It is evident throughout the iconography from the Early Dynastic onwards that the
Egyptians were accurate observers and recorders of nature. In the period covering
the Middle Kingdom and the New Kingdom to the Ramesside Period, excluding
the Amarna Period, private tomb decoration achieved a limited freedom from the
rigorous ‘canon’ of Egyptian art and attempts were made at expression and
depicting nature in a more realistic manner (Desroches-Noblecourt 1966: 21-22).
Nevertheless, if realism was the only reason for these depictions, it could be argued that L11 could have been depicted earlier.

4-3-12 Type L12: lettuce as a sceptre K 28, 28a

In 1924 the eminent botanist, Keimer, published two pieces of research for which he has been credited with identifying the plant in the iconography as *L. sativa*. In the first of these publications ‘*Die Gartenpflanzen im alten Ägypten*’ (1924a: 77-78), he discussed lettuces held by statues and kings. Bearing in mind that Keimer was an experienced botanist, he made an interesting connection between his type K28 (Fig. 4-33) and the *nhbt*sceptre held by the deceased Seti I in a relief at Abydos (Fig. 4-34). Keimer speculates that this might be a lettuce stripped of its leaves, with an inflorescence left at the top (PM VI: 26, 241-242; Mariette-Bey: 1869: pl. 50).

If, however, a comparison is made between K28 and the lettuce under the offering table in figure 4-34, there does not appear to be any resemblance. It is difficult to see a thin-stalked plant such as that in figure 3-2 being rigid enough to be held as a sceptre. It was postulated that a thick stalked-lettuces developed in Egypt (Ryder 1999: 17-18), and this type of plant might be the one represented here, but without primary evidence this cannot be substantiated.

The determinative in the alternative writing of ‘*nhbt*sceptre’ as defined in *Wb* II: 294 differs from the depiction of the sceptre in figure 4-34 which has a round knob with a button-like protuberance on it. The sceptre held by Seti I is one that is carried by a god, which would be appropriate in the case of the deceased king.

![Figure 4-32](image1.png)

**Fig. 4-32.**
The entry in *Wb* II: 294 for the *nhbt*sceptre.

![Figure 4-33](image2.png)

**Fig. 4-33.**
‘Lettuce sceptre’.
(Adapted from Keimer 1924a: 167, no. 28)

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Fig. 4-34.
Abydos, Temple of Seti I,
Staircase Y, right hand side.
Compare the lettuce under the offering table with object held by Seti I: there
appears to be no resemblance.
(Adapted from Mariette-Bey 1869: pl. 50)

The frieze on the Middle Kingdom coffin of Sebek-O found at Gebelein depicts a
similar-shaped ceremonial sceptre or mace (Fig. 4-35). It appears to have a stone
head through which the wooden handle protrudes. The overall shape is very like
the sceptre held by Seti I in figure 4-34. Maceheads such as these were symbols of
power and authority and they do not resemble a lettuce. It is difficult to see how
Keimer associated such a mace head or sceptre with the lettuce.

Fig. 4-35.
Two sceptres or maces on the frieze of the coffin of Sebek-O.
The right hand one resembles the sceptre held by Seti I in figure 4-33.
(Adapted from Steindorff 1901: Tafel II)
4-3-13 Third Intermediate Period: type L13

Keimer identified five types in this period, most of which are from the Twenty-first Dynasty: K11, 15, 17, 18 and 23b and are drawn in a cursory style as in figure 3-8.

One type that Keimer did not note is that in figure 4-36, which is a more angular version of the wavy-edged lettuce and appears on a number of painted wooden stelae and coffins.

![Image](image_url)

**Fig. 4-36.**

Wooden stela of Denienkhonsu, a musician of Amun, probably from Thebes, Third Intermediate Period. Two lettuces type L13 depicted under the offering table.

BM EA 27332

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4-3-14 Lettuce type L14 and block statues in the Twenty-fifth Dynasty

Lettuces were depicted in the hands of the subjects of block or cube statues at all times of their production from the Middle Kingdom until the Ptolemaic Period.30 These private statues became particularly popular in the Twenty-fifth Dynasty, when they were a common form of ex-votos offering so that the deceased could

30 For a detailed review of block statues see Schultz (2011); Perdu (2012: 76-81).
perpetually participate in the rituals and festivals of the temple. They were relatively easy to carve and their solid nature rendered them less likely to damage at the open sites in the areas of the temples where they were deposited. The large, flat surfaces were suitable for inscriptions, whilst offerings could be deposited on the flat surface formed by the bent knees that were covered by a cloak. From the Tuthmosid Period, a lettuce plant is often depicted held in one or both hands of the statue and was thereafter the most important attribute depicted, particularly in the Ramesside period, until after the Twenty-fifth Dynasty when it began to decline in popularity (Fig. 4-37) (Schulz 1992: 639 with table; 2011: 3-4; Bothmer 1994: 63-68; Perdu 2012: 76). These statues were not offered to Min and neither was the lettuce. However, the lettuce that was depicted was a symbol of the hope of fertility and re-generation or renewal, and it became the most important attribute depicted in the hands of the statues (Schultz 2011: 2-4).

Fig. 4-37. Limestone block
statue of Iti.
Reign of Shabaka, Twenty-fifth Dynasty.
BM EA24429.
©Trustees of the British Museum
For the purpose of this thesis, lettuces on block statues are grouped together as type L14 (Fig. 4-37, Fig. 4-38, Fig. 4-39, Fig. 4-40). The lettuces depicted were pointed or round ended and club-shaped with the leaves usually indicated. Perdu was at pains to point out that the plant was a lettuce, referring to it as ‘une prétendue laitue’, and that it was not the same as ‘une sorte de palme’ as he described a plant on other block statues (2012: 122, 393, 396). Brandl, on the other hand, confidently referred to the plant as a stylised *L. sativa* (2008: 349-350) and Frood, who examined the plant on CGC 42225 (Nebnetjeru), confirmed it to be a lettuce (Pers. Comm. 2014).
4-3-15 Twenty-sixth Dynasty: the Saite re-unification: type L15

Figure 4-41 is a painted wooden funerary stela of the Divine Adoratrice of Amun, Kema (Musée de Zagreb, collection Koller Ancien no. 567) (Monnet Saleh 1970: 40).

Under the offering table is a pointed, elongated triangular-shaped object which appears to be a highly stylised lettuce in the form of a long triangle, depicting the plant, and a short inverted triangle, representing the stem. The pointed object in front of the god’s legs may also be a lettuce but a comparison with the horizontally-striped container of the object next to it suggests they may both be an offering of bread in a pot.

![Fig. 4-41. Painted wooden funerary stela. Type L15 depicted under the offering table. (Monnet Saleh 1970: 40)](image)

4-3-16 Twenty-seventh Dynasty, the First Persian Period, Type L16

Keimer noted only one type of lettuce, K16, for the Late Period, after which his identifications ceased. However, the First Persian Period Temple of Hibis in Kharga Oasis proves to be a valuable source for lettuce types of the period because more than one type is depicted there and often multiple versions are included in the same scene.
In figure 4-42, type L11 lettuces are depicted on the shrine behind Amun-Re and being offered to Amun-Re.

The first new type, L16, is depicted in figure 4-43 and figure 4-44. The plant is squat with a rounded tip. The leaves are indicated with almost horizontal lines and the stems are thick and long enough to protrude from the bottom of the hand holding them. Although the text refers specifically to lettuce, the representation is very like that of the mnHp plant discussed in 6-5-14.

The text in front of the king, Darius I, reads:

*Presenting lettuce to his father, Amun-Re ka-mwt.f, who is upon the great [seat].*

(Trans. Cruz-Uribe 1988: 167)
Fig. 4-43.
Darius I offers two lettuces to Amun-Re kꜣ-mwt.f.
Inner gateway, interior, north wall, temple of Hibis.
(Adapted from a copy by C. K. Wilkinson in 1927 in: Davies 1953: pl. 60)
Compare with figure 4-44 below of the wall painting in 2015.

Fig 4-44.
Fig. 4-43 as it appears in 2015.
(Taylor 2015)
Type L17 is club-shaped with various forms of in-fill: in figure 4-45 it is cross-hatched instead of leaves being delineated and is distinguished from other club-shaped lettuce at Hibis which have either v-shaped hatching (Fig. 4-46) or rows of wavy lines (Fig. 4-47).

Fig. 4-45.
Lettuce type L17 with cross-hatching being offered to Amun-Re. Temple of Hibis, hypostyle hall north, west wall, southernmost bay. (Adapted from Davies 1953: pl. 41)

Fig. 4-46. L17 with v-shaped hatching. Fig. 4-47. L17 with wavy lines.
Types of L17 at Hibis temple. (Adapted from Davies 1953: pl. 59, 61)
4-3-17 Min, the lotus and the $\mathfrak{s}n\mathfrak{w}$-ring

A further significant change commenced at the start of the Eighteenth Dynasty when a flower with its stem inserted in a $\mathfrak{s}n\mathfrak{w}$-ring began to be depicted between two lettuces on the naos-style shrine behind Min (Figure 2-21, Figure 4-48). This style of depiction continued until the Roman era. It first appears in the chamber at the south-west corner of the Upper Court at the mortuary temple of Hatshepsut at Deir el Bahari (Naville 1906: pl. CXXXII).

![Image of a artifact depicting a flower with a $\mathfrak{s}n\mathfrak{w}$-ring]

**Fig. 4-48**
BM EA74170
(PM II² p.212, 40, a-d)

Two lettuces and a lotus standing in a $\mathfrak{s}n\mathfrak{w}$-ring on a naos.
North door-jamb, Temple of Re-Horakhty, Karnak
© Trustees of the British Museum

Gauthier suggested two explanations for the double flower:

A combination of the lotus (*N. caerulea*) and possibly a species of lily, bringing together symbols of Upper and Lower Egypt that characterised the royal associations of Min (1931a: 151).

Here Gauthier appears to have confused ‘lily’ with the papyrus symbol of Lower Egypt.

The double flower may have been borrowed or transferred from Amon of Thebes.
In the Nineteenth Dynasty, the lettuces and šnw-ring disappeared, leaving the lotus flower standing alone directly on the naos (Fig. 4-49). This depiction was contemporary with the representations of the pr.t Mnw in the temples of Medinet Habu and the Ramesseum. After the Nineteenth Dynasty, this type of depiction became rare but re-appeared on stelae in the Graeco-Roman Period (Gauthier 1931a: 152).

Fig. 4-49.
Upper part of Stela 652 in the British Museum.
Min with a single lotus plant on the naos is depicted at the front of the top row of deities.
(Budge 1909: 181)

Whilst the association of Min and the kingship did not diminish, as the lettuce accompanying Min symbolized fertility so the lotus and šnw-ring that replaced it were symbolic of power, protection and life (Gauthier 1931a: 151-155; Bell 1997:183; Eaton 2013: 117).

4-4 Lettuce in three-dimensional representations

This chapter commenced with a case study of identification problems and ends with another similar ‘three-dimensional lettuce’ study. Although Adams (1980) thought she had identified the only three-dimensional lettuce artefact, this did not prove to be so (see 4-2, figure 4-3) and three-dimensional examples remain rare
and controversial, the ‘lettuce’ amulets discussed in 4-2 and in figures 4-6 and 4-7, possibly being the exception.

It is reported that X-rays apparently reveal that the Eighteenth Dynasty mummy of Meryt (also Merit), the wife of Kha, wears a broad collar on which is strung a cos lettuce amulet or bead (Andrews 1994: 88), but no mention is made of a specific lettuce amulet in the radiological report (Curto and Mancini 1968: 77-81). Lettuce is a fertility symbol associated with males, so this is an unusual occurrence if correct, but Meryt is believed to have died before Kha and some of his (male-oriented) funerary artefacts are known to have been used in her burial (Meskell 1998: 373-375). It may be that the artefact identified as a lettuce is a similar representation to that in figure 4-50, which is identified as a green faience ‘leaf pendant’, also from the Eighteenth Dynasty (Lacovara 2001: 115, fig. 68).

![Leaf pendant](image)

**Fig. 4-50.**
Leaf pendant (rotated through 90 degrees).
Thalassic Collection Ltd., M. C. Carlos Museum.
(Adapted from Lacovara, Teasley Trope and D’Auria 2001: 115, fig. 68)

This artefact does not resemble the lettuce amulets in figures 4-6 and 4-7 above, which could represent a whole lettuce head and leaves. Figure 4-50 shows a single leaf that does not compare with the ‘lettuce amulet’ discussed in the case study in 4-2. The leaf pendants in a comparable reconstructed broad collar (Fig. 4-51) of the early New Kingdom are described, perhaps more realistically, as palm leaves but, to further confuse the issue, number 8 of Keimer’s lettuce identifications of the Middle Kingdom (figure 3-8) also bears a resemblance to figure 4-50 above. Two types of similar-shaped, green ‘moulds for leaves’ were found at Tell el-Amarna (Petrie 1894: 30; pl. XX, 544, 545).

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The correct identification of such ‘pendants’ or amulets is another example of how difficult it can be to identify such objects. (See also 3-2-2).

4-5 Position of lettuce in scenes other than those of the king offering to Min

There does not appear to be any relationship between the type of lettuce and its position or lettuce and any other type of offering. It is a soft, easily crushed vegetable, and it was not always placed on the top of the pile of offerings so, realistically, it should appear to be squashed under the other offerings (Fig. 4-11, 4-13, 4-14, 4-16), but, nevertheless, it was still depicted as a perfect lettuce for eternity (see also 4-5-1 below).

Figure 4-52 illustrates more positions in which lettuce was placed: on top of the pile of offerings, under the offering table leaning against the table-leg and either propped up between two jars or lying on the floor.
Fig. 4-52.
Lettuce depicted on the inner side of the Middle Kingdom coffin of Sebek-O
Königlichen Museen zu Berlin.
(Adapted from Steindorff 1901: Tafel II)

4-5-1 Consistency
Where a type has been depicted, in whatever dimension, for a length of time as,
for example, type 2 was prevalent in baskets of offerings during the Old
Kingdom, a consistency can be seen in the representations. This may be due to a
number of reasons:

- Paintings and reliefs in funerary contexts are known to be stylised so that
an ideal world was depicted in the afterlife.
- Cut lettuce rapidly wilts, but lettuce always appears fresh and crisp in the
iconography because it must symbolise life and rebirth.
- Wilted lettuce would be associated with decay and death and its inclusion
would, therefore, be inappropriate.

The grid on which Egyptian art was drafted enabled subjects to be faithfully
reproduced time after time, although skilled draftsmen may have been able to
reproduce images freehand.

The existence of pattern ‘books’ has been postulated to explain the similarity
between tomb depictions located hundreds of miles apart or in different temporal
zones (Spiegel 1940: 156-172; Manniche 1988: 14-15; 50; Vassilika 1989: 7-11
and footnotes, 199-200; Der Manuelian 1994: 55; Kahl 2010: 4-5). Evidence for
such ‘books’, albeit in the form of carbonized papyri, has now been discovered at Tanis (Quack 2014: 17-28).

4-6 Summary

In this chapter two case studies have highlighted the difficulties involved when interpreting artefacts. The changes in the morphology of the lettuce from the Old Kingdom to the Graeco-Roman Period have been over-viewed and how the gradual stylisation of the plant occurred from the Eighteenth Dynasty onwards.

The relationship between Min and the depiction of the lettuce with him changed over the period under discussion, eventually culminating in the god’s assimilation with the Roman god, Pan.

This thesis is about the association of Min and the lettuce so an in-depth analysis of the evolution of lettuce in the iconography was beyond the remit, but the subject does warrant further research in connection with the development of two types of lettuce.
5-1 Introduction

The search for an effective substance capable of increasing sexual pleasure and of maintaining or restoring sexual prowess is a quest

‘...which has occupied every civilization throughout history...’ (Taberner 1985: 2).

Taberner considers that the desire for ‘aphrodisiacs’ is perpetual, despite the fact that no effective aphrodisiac has been found, because

‘...people will always believe what they want to believe’ (Taberner 1985: 256).

This sentiment was re-iterated by Harlan (1986a: 9) in his discussion about the diametrically opposed aphrodisiac effects of lettuce and poppy latex as used by Egyptian and Greek societies.

Taberner listed over 400 ‘aphrodisiacs’ of animal, vegetable and mineral origin and, with the development of synthetic so-called ‘aphrodisiacs’ in the twentieth-century, the number has greatly increased. However, none of the alleged aphrodisiacs in his list had been subjected to rigorous scientific examination when he was writing (1985: 57). International interest in natural drugs has increased since Taberner’s research, because of concern about the cost of producing synthetic drugs to treat sex-related problems and their, as yet unproven, long term benefits and risks of side effects. Evidence for the efficacy of natural drugs as aphrodisiacs is minimal but empirical evidence for the use of natural compounds in relation to sexual health is now being sought and evaluated (Drewes, George and Khan 2003: 1019; MacKay 2004: 4-16; Malviya, Jain, Gupta and Vyas 2011: 3,7). Lactuca species do not appear to be of much interest to Western mainstream medical systems, but the current interest in the use of ‘natural drug resources’ (Campbell 2008: 216; Evans 2009: 485-486) has opened up the aphrodisiac debate to include disinhibitors such as alcohol and plant based psycho-active substances (Merlin 2003: 295-323).
Defining what constitutes an aphrodisiac is complex for a number of reasons. The following definitions are from British English dictionaries. The Concise Oxford English Dictionary (2011) defines the word thus: ‘noun a food, drink or drug that stimulates sexual desire’. The Oxford English Dictionary (1989) goes into more detail:

A. adjective Of or relating to sexual desire: that tends to increase sexual desire
B. noun a drug or preparation inducing sexual desire

The Oxford Concise Medical Dictionary (2012) states that it is a noun:

‘an agent that stimulates sexual excitement.’

Taberner was probably correct in describing an aphrodisiac as ‘... an exciter of lust.’ (1985: 3) but it is arguable whether there are any substances that can increase human sexual desire as pheromones are known to do in animals (Wyatt 2003). Medical and scientific evidence indicate that no pharmacological substances exist that enhance sex drive, and a number of researchers have stated that there is nothing to indicate that social drugs can be used as effective sexual stimulants (Hollister 1975: 661; Taberner 1985: 1; MacKay 2004: 4-5, 13). There are, however, effective pharmacological treatments for erectile dysfunction (Pryor 2002: 389-400).

The evidence against the existence of aphrodisiac substances for clinical use was supported by the removal of the last substance classified as such from the British National Formulary in the late twentieth-century (Taberner 1985: 215). This aphrodisiac, a combination of testosterone and yohimbine, was originally marketed as Potensan and, since 1990, has had to be re-marketed on the Internet described as a natural food supplement (Potensan 2012).

There is a clear distinction between sexual desire and sexual performance. The term aphrodisiac should be restricted to substances that increase libido/sexual desire. Notwithstanding, it is claimed that aphrodisiacs act in three major ways (Sandronini 2001: 303-307): by increasing the libido, altering either specific neurotransmitters or hormone concentrations; by improving sexual performance through the induction of vasodilation and by increasing sexual pleasure through enhanced sensory perception.
However, all three actions can be inter-dependent, resulting in an overlap of many of the ‘mechanisms’ involved, and this interaction complicates the measurement of any resulting effects (Hollister 1975: 661). In order to be effective, there must be a measurable and perceptible effect of a cure, relief or assistance for a condition from a drug (Riddle 1992: XV, 15).

The lack of objective methods, disagreement between experts as to how sexual desire, as opposed to physical arousal, can be measured, and concomitant variables such as conditioning, have caused many problems when trying to prove the existence of a substance to increase desire (Hollister 1975: 661; Gawin 1978: 107-117; Taberner 1985: 164-167; Peugh and Belenko 2001: 224, 229-230; Zanolari 2003: 16; MacKay 2004: 7). Before the discovery of sildenafil (Viagra) in the mid-1990s there were no reliable drugs to treat erectile dysfunction. It is not surprising, therefore, that writers in the 1970s and 1980s were sceptical about the effectiveness of pharmacological treatments for this and other problems of a sexual nature.

Some of the problems of defining ‘aphrodisiac’ were pre-empted by the proposal of a wider definition than the strictly limited, later ones cited above. The expanded definition embraced the

‘...effect of a pharmacological substance on the subjective pleasure of sexual experience, independent of any effect at all on what is commonly called libido or sexual drive...’ (Gawin 1978: 108-109)

Gawin’s rationale counter-acted the medical profession’s moral and social reactions against aphrodisiacs and the recreational use of drugs in much the same way that social mores appear to have influenced the study of the sexual aspects of Min. There is, however, a flaw in the new definition which Gawin himself later acknowledged. He concurred that no true aphrodisiacs exist under the old definition (1978: 107) but to test his new definition, double-blind studies involving human subjects would be necessary. The protocol of the studies involved the probably unreliable self-reporting by subjects of subjective experiences and, controversially, would involve the use of psychoactive drugs such as marijuana, LSD and hallucinogens (1978: 114-116). Consequently, Gawin’s theory of ‘...a libido-oriented model of aphrodisiacs...’ has received little acceptance from the medical profession (1978: 116).
Taberner (1985: 1) agreed with Gawin’s definition and went on to develop it in his own work on aphrodisiacs. Latterly, Zanolari (2003: 7, 11) has added ‘...or of stimulating the sexual desire of selected members of the opposite or same sex by various means.’ to the range of current definitions. He re-iterated Taberner’s suggestion (1985: 3-4) that ‘...in practice anything which increases the capacity for sexual enjoyment will tend to increase the appetite and can be considered an aphrodisiac.’

The definition of ‘aphrodisiac’ in popular usage is, therefore, a wide-ranging one and also includes substances which are intended to induce an increasing sexual desire for pleasure. Whilst synthetic drugs such as sildenafil citrate are popularly referred to as aphrodisiacs, they were developed to relieve specific medical conditions and to improve male sexual function rather than to increase desire (Mackay 2004: 5). The definition now encompasses natural and synthetic substances relating to erectile dysfunction, formerly referred to as impotence (National Institutes of Health 1993: 83, 89; Haimov-Kochman, Sciaky-Tamir and Hurwitz 2005: 8). This condition was acknowledged in Egypt and a treatment is recorded in Papyrus Ebers LXXXIII:

‘Another for weakness of the male member (ie impotence):
Hyoscyamus, beans, bran (?), ḫr, sawdust of pine, sawdust of mrt, sawdust of willow, sawdust of zizyphus, sawdust of sycamore, sawdust of juniperus, juice of acacia, juice of zizyphus, juice of tamarix, juice of sycamore, flax seed, fruit of tamarix, white oil, goose fat, pig’s dung, pignon, myrrh, onion, colocynth, ? of gšt, water-melon, ḫw, bḥḥš (?), njt of flax, northern salt, salt from oasis, inb, red ochre, yellow ochre, natron, grease of ox šškt are mixed together and (it) is bandaged therewith. (Trans. Ebbell 1937: 97)

The word(s) for ‘lettuce’ do not appear, but recipes and ingredients can be difficult to translate with precision, and so it is difficult to comment on the identity and effectiveness of the natural ingredients listed (see, for example, Ghaliounghui 1987: 1-2). Indeed, it may be that the recommended application of some remedies - by massage to the genitals – was perhaps equally, if not more, effective than the ingredients themselves in effecting a cure (Ratsch 1997: 170).

When considering the aphrodisiac potential of lettuce in this thesis, the widest definition of ‘aphrodisiac’ has been adopted but only plant-based aphrodisiacs are compared and contrasted with lettuce. This is because drugs sourced from
minerals or animals do not usually act as intoxicants (Counsell 2008: 195) whilst synthetic drugs were unavailable to the Egyptians.

5-2 Ethnopharmacology of aphrodisiacs in Arab-Islamic medicine

The resurgence of interest in natural substances against synthetic and chemical-based drugs as a source of aphrodisiacs and treatments for erectile dysfunction has influenced medical systems world-wide, all of which have used plant-based medicines for centuries (Dohadwalla 1985: 49-53; Sandroni 2001: 303-307; Drewes et al. 2003: 1019-1025; Rowland and Tai 2003: 185-205; MacKay 2004: 4-16; Kamatenesi-Mugisha and Oryem-Origa 2005: 40-49; Malviya et al., 2011: 3-8).

The World Health Organisation (WHO) has acknowledged the value of ethnopharmacology to the development of new drugs and has instituted programmes to investigate and preserve oral traditions, many of which are being forgotten and lost with the spread of Western medicine (Baasher 1980: 75-79; WHO: 2000). Although the Western system of medicine is widely accessible in the Arab world (Ghazanfar: 1994: 1), it functions alongside overlapping, traditional ethnomedical systems31 that demonstrate a long oral and written tradition tracing back through Greek and Roman medicine to Egypt which heavily influenced the later development of Western medicine (Sayed 1980: 19; Pormann and Savage-Smith 2007: 151-Saad and Said 2011: 20, 49; Gy ry 2011: 151).

Of the drug sources used by the ancient Egyptians, 50% are still in use today, although some are now synthesised, and a comparison of the uses of some of the ethnomedicines found in the ancient and modern systems, particularly in rural communities, may parallel practices that existed in ancient Egypt (Germer 1998: 90; Campbell and David 2010: 23). One such practice, for example, occurs in current Islamic medicine. In this system of medicine, an illness may be cured through prayer or recitation of verses from the Qu’ran, a practice known as ‘spiritual medicine’. The patient is advised to write down specific verses from the Qu’ran on glass or ceramic material, the writings are soaked in water which

31 Tradtional medicine is defined as: ‘…the sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness.’ (WHO: 2015)
absorbs the power of the texts and the liquid is then drunk (Saad and Said 2011: 138-139).

This recalls the use of *cippi* in ancient Egypt which can be traced from the Eighteenth Dynasty to Byzantine Christendom (Ritner 2008: 106). *Cippi* were a specific form of apotropaic and curative stelae which were placed in temples or homes or, alternatively, were worn as small amulets. Attested from the Ramesside period, they were very popular in the Late Period and their use continued into the Roman period. Their purpose was to protect against or cure bites from scorpions, snakes or crocodiles. Horus the Child (Harpocrates) was protected against these creatures by spells (Borghouts 1978: 62-72). Harpocrates was, therefore, depicted on *cippi* trampling on a crocodile whilst holding snakes and scorpions to symbolise his power to overcome poisonous reptiles and dangerous animals.

Protective inscriptions often covered most of the stelae and water poured over the stela was believed to magically absorb the power of the words and the depictions; the water was collected and, when drunk, was believed to protect or cure the imbiber. The inscriptions may also have been read or recited aloud as the water was poured over them (Abdi 2002: 207-209; Ritner 2008: 106-107). The Metternich stela is probably the best-known example of this genre (Metropolitan Museum of Art 50.85 Fletcher Fund 1950) (Scott 1951: 201-217).

Returning to ethnopharmacology, a comprehensive survey of medicinal herbs and their uses was made in the Golan Heights, West Bank and Arab settlements in Israel where a number of unidentified plants are used in the treatment of 'sexual weakness’, which may imply impotence or erectile dysfunction. The survey lists no usage of *Lactuca* species (Said, Khalil, Fulder and Azaizh 2002: 251-265). A second report, published a year later covering the same area, notes that ‘sexual weakness’, rather than a specific need for aphrodisiacs, is catered for but no lettuce is cited (Azaizh, Fulder, Khalil and Said 2003: 101-105). A similar survey of Moroccan medicinal plants showed several different plants used as aphrodisiacs but, again, no *Lactuca* species (Bellakhdar, Claise, Fleurentin and Younos 1991: 123-143). Of other aphrodisiacs used in ancient Egypt, mandrake was still used in rural Morocco and the Ajloun Heights region of Jordan but not lettuce. The countries of the Arabian Peninsula do not appear to include *Lactuca* species in their ethno-pharmacology for any purpose (Ghazanfar 1994; Merzouki,

In Egypt, research is focusing on the use of crude (i.e. unrefined) plant materials such as unprepared leaves, flowers, fruit and bark for medicinal purposes. In 1963 Fahmy published a paper about the drug plants of Egypt, including L. sativa, in which he expressed the hope that Egypt could become a world-class supplier of such drugs and a number of government-backed institutes are now involved in this research (Sayed 1980: 19-22; Soltan and Zaki 2009: 102-107; El-Seedi, Burman, Mansour, Turki, Boulos, Gullbo and Göransson 2013: 746-757). Relevant to the present research are the studies of lettuce seed oil as a sedative and for treating insomnia (Said, Kashef, Mazar and Dalama 1996: 215-219; Sayyah, Hadidi and Kamalinejad 2004: 325-329; Yakoot, Helmy and Fawal 2011: 451-456). Other current uses of lettuce in the Middle East are listed in Table 5-1.

<table>
<thead>
<tr>
<th>Country</th>
<th>Species</th>
<th>Part</th>
<th>Use</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>L. sativa</td>
<td>seeds</td>
<td>male infertility</td>
<td>el-Hadidi (1992: 324)</td>
</tr>
<tr>
<td>Egypt</td>
<td>L. sativa</td>
<td>leaves, seed</td>
<td>eye diseases</td>
<td>Lev &amp; Amar (2006: 436)</td>
</tr>
<tr>
<td>Egypt</td>
<td>L. sativa</td>
<td>seeds</td>
<td>rhinitis, asthma, pertussis,</td>
<td>Said, Kashef, Mazar &amp; Salama (1996: 215)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>insomnia, rheumatism, insanity</td>
<td></td>
</tr>
<tr>
<td>Iran</td>
<td>L. sativa</td>
<td>seed extract</td>
<td>analgesic, anti-inflammatory,</td>
<td>Sayyah, Hadidi &amp; Kamalinejad 2004: 325-329</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>gastrodynia &amp; osteodynia</td>
<td></td>
</tr>
<tr>
<td>Iran</td>
<td>L. sativa</td>
<td>leaves</td>
<td>anemia (sic) tuberculosis,</td>
<td>Mikaili, Shayegh &amp; Asghari (2012: S1191)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>gastritis, alopecia</td>
<td></td>
</tr>
<tr>
<td>Mediterranean</td>
<td>L. virosa</td>
<td>‘fruits’</td>
<td>as a wild food plant</td>
<td>Saad &amp; Said (2011:467, Table 17.3)</td>
</tr>
<tr>
<td>area, generally</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jordan</td>
<td>L. virosa</td>
<td>‘aerial parts’</td>
<td>typhoid, diuretic, hypnotic</td>
<td>Al-Qu’ran (2009:47)</td>
</tr>
</tbody>
</table>

Table 5-1 Current uses of Lactuca species
Also of note is a report that seeds of *L. sativa L. ssp. minii* Hadidi, ssp nov. are still collected in Sohag and Qena provinces in Middle Egypt as their oil is reputed to enhance male fertility. This sub-species grows in a part of Middle Egypt once considered to be the province of Min (el-Hadidi 1992: 323-325, fig.1) (Fig. 5-1).

![Fig. 5-1](image)

**Fig. 5-1**
The shaded area indicates where lettuce with oil-bearing seeds grows wild in Middle Egypt in the twentieth century.
(Adapted from el-Hadidi 1992: fig. 1)

It should be noted from Table 5-1 that lettuce is not cited as a remedy for impotence, neither is it used as an aphrodisiac, but the seeds are recommended for fertility treatment. This is borne out by Saad and Said who do not mention *Lactuca* species in their list of plants used to treat male sexual dysfunctions. The most popular commercial herbal preparation for ‘reduced male sexual vitality’ in Graeco-Arab medicine appears to be *Ferula foetida* (Saad and Said 2011: 306, 319-322).

In a study of ancient Babylonian medicine, Geller questions how ancient physicians in any culture, including Egypt, would have known which plants and substances were effective for any specific purpose or condition. He concluded that
epidemiological reliance would have been placed on a combination of observation over a long period of time and a hit-and-miss approach together with the recording of results and reports from patients. The relevant factor was the ability of the physician to recall at a later date whether or not the substance appeared to work. There was no validation of the result and no proof was required and this approach is still relied upon in rural traditional medicine in the Arab world (Geller 2010: 13, 16-18).

Medicine and magic32 or ‘...experiment and belief...’ (Gry 2011: 151), in conjunction with the gravitas associated with religion, are known to have been an integral part of the Egyptian healing practices (Dawson 1942: 184-187; Quirke 1992: 106-122; Györy 2003: 276-283; Pinch 2006: 120-146; Ritter 2008: 4-13, 53-57; Baligh 2010: 7; Geller 2010: 8-10). Incantations and spells still play an important part in Arabic medicine together with sympathetic magic using inorganic artefacts, paralleling the ancient Egyptian use of amulets representing human parts that Petrie termed ‘homopoeic’ (1914: 6-7, pl. 1, 1a-16e).

Geller further qualified magic and medicine as ‘...the psychological and technical approaches to healing...’ and as ‘... these two complementary methods of healing...’ (2010: 8-9). Magic had a therapeutic value, particularly when enhanced by ‘Suggestion and expectation of a cure...a phenomenon now known as the placebo effect.’ (Nunn 1996: 97). This effect, together with its meaning and relevance to medicine ancient and modern has been examined in detail and with reference to various cultures over time (Moerman 2002; Miller, Colloca and Kaptchuk 2009: 1-20). A standard definition does not exist apart from a generic description of ‘beneficial effects’ that are produced in part by the ritual of treatment and the patient-doctor association rather than by the medical interventions (Miller et al. 2009:1). The concept was evidently practised in Islamic medicine by Rhazes, an Arab clinician in the ninth century (Saad and Said 2011: 10). Taberner had earlier stated that ‘...the placebo effect plays an important part in the action of most aphrodisiacs, both past and present’ and Harlan was not

32 Ritter (1995: 43-60); (2008: 4--28) discussed at length the implications of the differences between ancient Egyptian and modern Western conceptions of magic. Differences between modern Western and other conceptions of medicine must also be recognised.
alone in repeating this idea (Taberner 1985: 168, 171-172; Harlan 1986a: 9; Pearce 2008: 51-51; Geller 2010: 9, 188 n113).

5.3 Importance of ‘aphrodisiacs’ in the ancient Egyptian afterlife

The evidence for the dynastic Egyptian afterlife is essentially male-oriented and gives a male-focused view of death and the afterlife. From the male viewpoint, only male sexual activity created new life: the female did not create. The female image was needed in the tomb and in the afterlife to excite the male, hence the New Kingdom tomb paintings depicting scantily dressed nubile young female dancers, musicians and servants pouring liquids and attending the deceased and his wife at banquets (Tyldesley 2011: 195-196) (see also 5.4-8). The female presence was essential for copulation and to provide the womb to produce the reborn soul of the deceased for his continued existence in the afterlife (Bryan 1996: 45; Cooney 2008: 2-3).

The deceased female was subject to the same male-oriented mythology as the man but her rebirth involved not only the fragmentation of her body and personality but the adaptation of her identity to that of a male. Once rebirth was achieved the female, in the same way as the male, became an akh or ‘transfigured spirit’ (Assmann 2005: 15). Evidence for the manipulation of the female and her identity to enable rebirth is confined to the royal and elite strata of society, there being no evidence for how, if at all, the ordinary people coped with such sophisticated concepts (Baines 1990: 1; Cooney 2008: 7-20).

The act of procreation by the male was symbolic of the means to a rebirth in the afterlife in addition to creating his heirs in actual life. It was, therefore, essential for the male to remain sexually active in the afterlife (Robins 1990; Meskell 1999: 123-126; De Trafford and Tassie 2006: 1-15; Cooney 2008: 1-4; Graves-Brown 2010: 101-103).

Spells 503 and 576 of the Coffin Texts indicate that the male hoped to remain sexually active after death.

CT 503:

‘I have gone up on Shu, I have climbed on the sunbeams; it means that my feet and my hands have attained...? To be recited by him who knows this text when he
goes forth, and that he may ejaculate his seed safely on earth, his heir existing for ever. His soul shall not be seized nor shall his shade be snared. A matter a million times true’. (Trans. Faulkner 1973)

CT 576:

Copulating by a man in the realm of the dead. My eyes are the lion, my phallus is Babi, I am the Outcast, seed is in my mouth, my head is in the sky, my head is on earth. I am one having power in my heart, mine is..., mine are... I am one who ejaculates when he knits together (?), I ejaculate seed as that one and this one. As for any man who shall know this spell, he shall copulate in this land by night and by day, and desire shall come to the woman beneath him whenever he copulates. To be recited over a bead of carnelian or of amethyst, to be placed on the right arm of the deceased. (Trans. Faulkner 1973)

CT 503 and CT 576 ensured the sex life of the deceased for his regeneration in the afterlife. The continuity of the line of descent and the regeneration of the dead were thus linked in a way that parallels the conception of Horus and the resurrection of Osiris (Troy 1986: 93).

In order to have an effective sex life after death, the deceased male appears to have undergone a ritual re-virilisation which was performed immediately after the Opening of the Mouth ceremony. In this ritual, a group of women symbolically re-enacted the copulation of Isis with the dead Osiris during which Horus was conceived and thus restored Osiris’ virility and, by association, that of the deceased (Desroches-Noblecourt 1953: 19-47). The original revirilisation of Osiris is mentioned in PT 366: 632:

‘Your sister Isis comes to you rejoicing for love of you. You have placed her on your phallus and your seed issues into her, she being ready as Sothis, and Har-Sopd has come forth from you as Horus who is in Sothis.’ (Trans. Faulkner 1969)

The ritual of revirilisation may be depicted on the second register of the Eleventh Dynasty stela of Sobekaa (BM EA 1372) (Fig. 5-2) (PM 1: II p. 807; Budge 1909: 33, no. 120; Scott-Moncrieff 1911: 54; Desroches-Noblecourt 1953: 24; Wildung 1984: 17; Willems 1988: 158; Pinch 1994: 152, pl. 8133; Stead 1994: 22; Willems 1994: 291-292). The long hair of the figure lying on the deceased indicates that it is a female, but the crude carving makes it difficult to establish the gender (Willems 1996: 291).34 Nevertheless, many scholars have accepted the figure as a

33 Pinch dates this stela to the Twentyfirst Dynasty.
34 For further discussion about the sarcophagus and its interpretation see Willems (1996: 291-292).
woman and the figure appears to be female in a parallel depiction on the Middle Kingdom sarcophagus of *Hnwy* (Fig. 5-3) (Königlichen Museen zu Berlin 13772) (Steindorff 1901: 11-19, Tafel III; Desroches-Noblecourt 1953: 19-25; Troy 1986: 92-93; Pinch 1994: 152, fig. 81).

**Fig. 5-2** Detail of the second register of EA 1372 showing the deceased with a small figure lying on top of him.

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**Fig. 5-3** Coffin of *Hnwy*: detail of the exterior of the coffin, left side.

*Königlichen Museen zu Berlin Nr. 13772*  
(Steindorff 1901: Abb. S.13.14)

It has been suggested that the figures on top of the deceased relate to the Shu spells in CT 80: 33-43, in which Shu revives Atum the first creator god by clinging to Atum’s neck and breathing air into the god. According to this hypothesis, the small figure on top of the deceased must be male and represents Shu re-vitalizing the deceased (Willems 1996: 92).
Budge described this scene as the deceased ‘... lying on his bier and embracing a child’, a description which Vandier reiterated (1950: 282-284, fig. 85). Budge may have misinterpreted the scene or it may be another instance of a deliberate avoidance of reference to something not considered proper for public discussion.  

The connections between sex, fertility, life and death have been examined from an anthropological viewpoint and from an Egyptological aspect (Bloch and Parry 1982; Meskell 1999: 123-128). The perpetual regeneration and rebirth necessary to maintain an afterlife were achieved through sexual activity by the deceased males who impregnated their deceased wives and thus enabled the male to be reborn (Bryan 1996: 44-45; Meskell 1999: 126; Meskell 2002: 184; Meskell and Joyce 2003: 100-108).

Sexual potency and the achievement of arousal and sexual intercourse were, therefore, vital to the Egyptian male in life and in the afterlife. It follows that every means would be employed to achieve this goal, including aphrodisiac plants left as offerings and a variety of symbolic or erotic depictions in wall paintings. All of these would be activated after death through sympathetic magic and would then be available to the deceased for eternity (Manniche 1991: 96-97; O’Connor 1996: 630; Graves-Brown 2010: 127).

**5-3-1 Lettuce offerings as aphrodisiacs**

The relative importance of an offered plant may be inferred from its inclusion in or exclusion from offering tables, offering lists or tomb depictions. If the lettuce was regarded as an important vegetable with significant aphrodisiac properties, it is logical that it would be included either as an offering depicted in reliefs or specifically referred to as an aphrodisiac in offering texts.

Lettuce is shown on offering tables in the iconography and carved on actual offering tables as a food for the deceased, but a search of 190 offering lists revealed that it does not specifically feature in such lists of the Old Kingdom (Hassan 1948: Foreword). This is a comparable situation to that found in a study of commodity price lists from the Ramesside period at Deir el-Medineh when it could only be assumed that lettuce was included under the collective heading of

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35 Further interpretations of the ritual are discussed by Lapp (1993: 186-188).
rnpt (vegetables) (Janssen 1975: 367) and it is reasonable to suppose that the same applies to lettuce in offering lists. In support of this argument, an inscription in the Fifth or Sixth Dynasty tomb at Saqqara of Nb-k'w-hr, which was usurped from one ẖt-ḥtp, describes seven offering-bearers bringing roast meat and iht\(^3\) (things), four of whom are carrying lettuce and a further two may carry unfinished depictions of the plant (PM III\(^2\) 2: 627, Map LXI, Plan LXIV; Hassan 1975: 16-18, fig. 2).

![Fig. 5-4 Detail of the mastaba of Nb-k' w-hr, Saqqara. All but the seventh bearer on the right carry lettuces. Lettuces arrowed are either unfinished or doubtful. (Adapted from Hassan 1975: fig. 2)](image)

If the Egyptians did regard the lettuce as an aphrodisiac, it is to be expected that lettuce would be depicted or mentioned in appropriate situations. However, whilst many scenes of offering tables before the deceased, such as that on the Twelfth Dynasty stela of Usr-wr (BM EA 579) (Fig. 5-5) depict lettuces, this was not so with all stelae, as in figure 5-6 for example (BM EA 64641) (Bourriau 1988: 29-31).

\(^{36}\)This is an Old Kingdom writing of the word (Gardiner 555). Translated as ‘products’ by Hassan.
Fig. 5-5 Stela of *Usr-wr* Eleventh or Twelfth Dynasty.

Lettuces of type L.8a can be seen on top of the offerings on both tables in front of the deceased. The bottom left corner of the stela is unfinished.

BM EA 579

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Fig. 5-6

Nineteenth Dynasty stela of the priest and temple scribe Hormin

No lettuce is depicted, the offering table bears a water pot shaded by a lotus blossom. Lower register: Hormin kneels before a statue of Ramses II. BM EA64641

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In depictions of Eighteenth Dynasty funerary banquets, lettuce is also conspicuous by its absence although many other symbols with alleged aphrodisiac associations are shown. Taking as an example the three fragments of funerary banqueting scenes from the lost tomb-chapel of Nebamun held by the British Museum (EA37984; EA37981 and EA37986), the following personnel, plants and foods are depicted all of which are believed to have erotic and/or aphrodisiac connotations:

- naked dancing girls
- singers and musicians
- ladies smelling lotus flowers
- lotus flowers and buds
- mandrake fruit
- wine and grapes
- food

It is also noted that these people, their actions and the plants and foods are symbolic of rebirth and regeneration.

The scene represents an idealised image of a gathering of Nebamun’s family, colleagues and friends with the deceased and his wife or mother, some of whom may already be dead, and depicts the life-style the tomb-owner hoped to enjoy in the afterlife. The participants are depicted as though they are feasting in honour of Nebamun but whilst they are seen to drink, no-one appears to be eating (Parkinson 2008: 71-91).\(^{37}\) Nowhere in these scenes or on the fragments from the same tomb held at Avignon (Musée Calvet A 51) or in Berlin (ÄM 18540) is lettuce depicted, unless it was on the fragments that are missing.

Furthermore, in the Turin Erotic Papyrus, where it is to be expected that aphrodisiacs would be in evidence, the lotus is frequently illustrated but lettuce is conspicuous by its absence. This absence of lettuce from scenes where aphrodisiacs would be expected appears to contra-indicate the perceived

\(^{37}\) For a discussion of the symbolism of and acts of eating and drinking in banqueting scenes see Baines (2014).
aphrodisiac nature of the plant and this does not appear to have been commented
on before.

54 Ancient Egyptian ‘aphrodisiacs’

The substances referred to in this section are examined here only for their
aphrodisiac potential; many are also used as offerings and will be re-examined in
that light in chapter six.

Written Egyptian references to what might be construed as aphrodisiacs are rare:
the Nineteenth Dynasty Papyri Chester Beatty X (BM 10690) and XIII (BM
10693) being, according to Gardiner (1935: 114), ‘...a novelty...’. The
constituents of the remedies are mostly untranslatable, either the word(s) denoting
lettuce, if ever there were any, cannot be deciphered or the papyri are too
fragmented for many words to be identified. The remedies are, however,
supplemented by magical spells of which a number of damaged sentences have
survived and enough remains to indicate that the papyri are about aphrodisiac
remedies although this is never explicitly stated (Gardiner 1935: 114-115).

In Papyrus BM 10690 entitled ‘From a book of aphrodisiacs’ two separate entries
are:

‘...for bringing seed...’ (verso 1,9)
‘Another prescription for revivifying the limbs of one dead’ (verso 1,4)

Here, Gardiner suggests that ‘dead’ refers to impotence as the prescription is for
an ointment to be applied to the penis (1935: 114). This remedy is included in
recto 1,2; 6; 7 and 10 and on the verso in 1,3; 6 and 13. Potions and an edible drug
are also mentioned for the same affliction.

 Spells to augment the prescriptions include:

Words to be recited whilst drinking the remedy. Raise thyself ...in the limbs of a
woman (?) slipping (?) in a field of corn. Horus ties himself upon...that the seed
may be powerful [on?] a member by night (?). To be recited four times (recto
1,5).

Hail to thee, thou [great?] god, who created the patricians, thou Khnum who
established the plebs, mayest thou test (?) the mouth of every vulva ...his cavern.
Be stiff, be not soft. Be strong, be not weak...Thou...est (thy) testicles (?), thou
strengthenest (thy) testicles together with Seth, son of Nut. To be recited over (recto 1,10)...sweet...the member to be anointed therewith. (Trans. Gardiner 1935: 114-115).

Papyrus No. XIII, BM 10693 contains another spell in the same vein:

‘... for the day when his heart approaches him, pounded together with ḫꜣt and the phallus [is to be rub]ed [therewith]...this phallus on... temple...in it on ...(10)...which fly and alight upon it in front of ...on the way to water.’
(Trans. from the hieratic by Gardiner 1935: 123).

Gardiner suggests that the reference to ‘...his heart approaching him’ may be construed as ‘when his desire comes over him’ (1935: 123, n. 3).

Those able to afford physicians would have had access to remedies containing aphrodisiac substances in recipes unrelated to conditions requiring ‘aphrodisiacs’ such as honey in a topical application (Ebers 109), herbs and spices for headache and general pain (Ebers 247) and beer in a cough mixture (Ebers 319) (Campbell, Saeed and David 2010: 36) albeit in small quantities and often as vehicles for other ingredients. It is also possible that priests may knowingly or unknowingly have ingested aphrodisiac plants such as lettuce, during the Reversion of Divine Offerings rituals when the offerings were distributed amongst the officiants (Alliot 1949: 103-105; Fairman 1954: 180-181; Fairman 1958: 102-103; David 1973: 146-147).

It would appear from the above criteria that only the rich and the elite may have been able to choose to acquire ‘aphrodisiacs’ even though the basic ingredients may have been readily available to everyone (Bertol, Fineschi, Karch, Mari and Riezzo 2004: 85). This is borne out by the depiction of many of the plants in tomb paintings and temple inscriptions. Again, this may be an accident of preservation as comparatively little is known about the lifestyle of the general population, but lettuce appears to have been available to everyone as a vegetable from at least the Old Kingdom onwards (Nunn 1996: 14) and hypothetically in folk remedies used by the non-elite.

5-4-1 Alcohol

Alcohol was probably the most popular and widely available form of aphrodisiac substance accessible in a variety of forms to all sections of Egyptian society.
Evidence from the iconography, archaeology and from the chemical analyses of wine containers indicates that most Egyptian wine was made from either dates, grapes, pomegranates, mead or the sap of the date palm (Murray with Boulton and Heron 2000: 592-3). Some of these plants or trees and also honey had aphrodisiac connotations not wholly related to alcohol as discussed below.

The evidence for wine and its production comes primarily from funerary sources. The earliest known evidence for grapes was found in Tomb U-j at Umm el-Qa’ab dated to Naqada III. The seeds were imported in storage jars from Palestine and tartaric acid traces indicate they may have been included in wine (Dreyer 1992: 293-299; Dreyer 1993: 23-62; McGovern, Fleming and Katz 1997: 10). Evidence on seal impressions shows that wine making was practised as early as the First Dynasty and from the Fourth Dynasty, wine production is depicted on the walls of royal tomb chapels (Petrie 1923: 102, 135; Harpur 1987: 81-82). Most of the detail is found in Eighteenth Dynasty private tombs at Thebes: these include scenes of viticulture (TT 93) and episodes of the wine making process (TT 39; TT 52; TT 155; TT 90; TT 155; TT 261).

Good quality wine was made from grapes (Vitis vinifera) but dates (Phoenix dactylifera L.) and the fermented sap of the doum or dom palm (H. thebaica) were also used (Wilkinson 1878: I 397; Beadnell 1909: 218; Lucas 1962: 22). The date palm was sacred to Re and symbolised femininity and, like the dom palm which symbolised male strength, it was also symbolic of rebirth (Tackholm 1977: 267-275).

The consumption of quality wine was almost exclusive to the elite (Murray 2000: 578) but workers at Deir el-Medineh are known to have received wine as a bonus (Janssen 1975: 350-352). The gods received offerings of wine: Ramesses III is recorded as giving 22,566 jars of wine to Theban temples alone (Breasted 1902: 172), and Min is depicted receiving wine from Thutmose III at Medinet Habu, sanctuary north wall (Epigraphic Survey 1940: pl. 210); and in the Tomb of the Two Sculptors at Thebes wine is depicted being poured over food offerings (Davies 1925: pls.V, VI, VIII).

Although many types of food and drink were offered in funerary contexts, beer was one of the three essentials together with bread and meat in the ḫtp di nsw
formula (Cauville 2012: 59-66). A variety of beers was consumed as a domestic staple at all levels of society both for nutritional and medicinal purposes (Geller 1992: 19-20; Murray 2000: 577-578; Samuel 2000: 537; Metcalfe 2010: 108-109). Previously considered to have been based on fermented bread dough, analyses of archaeological evidence for beer making now suggest that sophisticated brewing procedures using grain fermentation were already practised in the Predynastic Period at Abydos and at sites Hk24 and Hk24a at Hierakonpolis (Peet and Loat 1913: 3-7; Peet 1914: 8; Geller 1989/90: 47-50; Samuel 2000: 539-557, 569-570, figs. 22.1a, 22.2).

Both beer and wine were used as vehicles for administering medicines (see Papyrus Ebers 109; 129; 319; 323 and 330) and in topical applications for general infections as well as medicines in their own right (Denke 2000: 320-326; Campbell, Saeed and David: 2010: 36-37; Metcalfe 2010: 108-109).

Many aphrodisiac plants and substances are disinhibitors in the form of ethyl alcohol, the principal pharmacological properties of which are:

- sedative
- anaesthetic
- analgesic anxiolytic
- muscle relaxant

The disinhibiting factor occurs during the initial phase of inebriation and acts as a social lubricant to reduce tension and inhibition and consequently to increase sexual desire (Myśliwiec 2004: 115). However, the use and classification of alcohol as an aphrodisiac can be double-edged: alcohol may act to increase the sexual appetite but does not necessarily increase the ability to satisfy the desire. Conversely, intoxication in the sense of excessive intake of alcohol, can act as an anaphrodisiac and cause the subject to be incapable of sexual activity both in the short and long term (Taberner 1985: 3, 120-138; Peugh and Belenko 2001: 223-225, 229-232). These effects, and those of many other aphrodisiac substances, are complicated by ‘...social and psychological expectations...’ (Peugh and Belenko 2001: 224), the differing responses of the sexes to such substances and the environmental, social and ritual situations (Sherratt 1995: 1-7).

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38 For example: Nubian wine (PT Utt. 151); tmmm wine (Utt. 184).
In depictions of banqueting scenes in tomb contexts, drunkenness moderated or breached the norms of behaviour and facilitated communication between spheres of existence such as the living and the dead (Baines 2014: 2). Nonetheless, one was not expected to behave in an unseemly way or become dishevelled as when a servant addresses a woman whilst her companion throws caution to the winds:

‘For your ka: imbibe to drunkenness. 
Celebrate. Hear what your companion says. 
Do not pass out (?) wrongly.’

‘Give me 18 
Jugs of wine! 
What I want is to get drunk on the spot…’

Alcohol was considered divine when included in religious rituals although ritual intoxication and ecstasy were not usual in Egyptian religion (Assmann 2001: 155) with the exception of the cult of Hathor, ‘...souveraine de la bière...’ at Dendera (Cauville 2011: 66-67). Here, ritual intoxication was engaged in to facilitate a deeper communication with the goddess through an altered state of mind or trance (Emboden 1978: 395-407; 1981: 39-83; 1989: 61-75).

A hymn inscribed on the interior west wall of the central kiosk at the entrance to the Temple of Medamud, possibly based on much earlier festivals occurring in the Thirteenth Dynasty, records part of a Festival of Inebriation (tḥy) that invoked and celebrated the return of Hathor at the start of the New Year:

‘Come! The procession is in the place of inebriation, that hall of travelling through the marshes.’ (Trans. Drioton 1927: 12-15; Darnell: 1995: 47-94)

Evidence for a building associated with rituals of drunkenness was not attested until 2005 when a Ptolemaic inscription was discovered at the Mut Temple at Karnak, which indicated that a columned ‘porch of drunkenness’ instigated by Hatshepsut once stood there (Bryan 2005: 182).

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39 For a detailed discussion of banqueting in ancient Egypt see Baines (2014).
Nevertheless, inebriation was a condition familiar to the Egyptians in everyday life and warnings against drunkenness are recorded in the Instructions of Ani (P. Boulaq 4, Cairo Museum; Suys 1935: 4, i):

‘Don’t indulge in drinking beer,
Lest you utter evil speech
And don’t know what you are saying.
If you fall and hurt your body,
None holds out a hand to you; Your companions …
Stand up saying: “Out with the drunk!”
If one comes to seek you and talk with you, One finds you lying on the ground,
As if you were a little child.’ (Trans. Lichtheim 1976: 137).

The Ramesside Instructions of Amenemope in Papyrus Insinger 4 (Lexa 1926: 6.13) also note the effects of alcohol:

‘Give a hand to an elder sated with beer...’ (Trans. Lichtheim 1976: 161)

5-4-2 Pomegranate (Punica granatum L.)

It is thought that the pomegranate was not introduced into Egypt until during the Eighteenth Dynasty when it was recorded in the Botanical Garden of Tuthmose III at Karnak (Germer 1985: 42; PM II: ii, 404-40). After that date, the pomegranate is frequently depicted in tomb paintings, for example in the late Eighteenth Dynasty tomb of Neferhotep which may depict a woman drinking pomegranate wine (šdḥ) presumably on the basis of her proximity to a pomegranate tree (TT 49; PM I: I: ii, 6) (Ratsch 1997: 122). šdḥ is usually translated as pomegranate wine (Wb. IV: 568; Loret 1892: 77-78; Lucas 1962: 23-24; Leahy 1985: 72 no.97, 101, figs. 13 and 13a; Murray 2000: 625) although Keimer considered the evidence to be inconclusive (1924a: 51, 152). There are arguments for šdḥ as a form of boiled wine, although boiled wines are not yet attested in the Pharaonic period, and it is possible that two forms of šdḥ existed: one an intoxicating drink and one used for embalming (Charpentier 1981: 1164b; Tallet 1995: 459-49; Murray 2000: 593).

The phytochemistry of the pomegranate indicates that the seeds and fruit pulp contain naturally occurring oestrogens which make the fruit an effective contraceptive: this was how it was used in ancient Mesopotamia and Greece
(Riddle 2010: 18-19). However, in Egypt the pomegranate was regarded as a symbol of fertility because of the large number of seeds contained in the fruit hence its inclusion as a symbol of fertility and rebirth in funerary contexts (Hepper 1990: 62). Interestingly, a Twenty-third Dynasty child’s coffin, found at Riqqeh, contained four pomegranates (grave 269, cemetery E (Meidum)) (Engelbach 1915: 18, pl. xix 6).

No aphrodisiac agent has been isolated from the pomegranate although the alkaloid iospelletierine (picrate), found in the bark, is known to heighten sensitivity (Ratsch 1997: 122). It appears that pomegranate was most likely to have been imbibed as a disinhibitor in the form of alcohol to loosen the inhibitions.

5-4-3 Honey and mead

It has not proved possible to extract any aphrodisiac substance from honey or pollen but, because of other properties contained in both, they are considered medicinally and nutritionally beneficial. Royal jelly, a concentrated food produced by bees for rearing queen bees, is claimed to stimulate human sperm production which may increase libido, but extraction techniques for this substance were only perfected in modern times and it would have been unavailable to the ancient Egyptians (Ratsch 1997: 173-174).

Nevertheless, honey could still be regarded as an aphrodisiac for a number of reasons. It was used as a vehicle for a remedy for impotence in Papyrus Ebers 663 and was applied or massaged onto the genitals, but it may have been the method of application as much as the honey which created any effect. Honey fermented in water, known as mead, was used in ritual drunkenness and honey itself was associated with sweetness and love (Ratsch 1997: 170). Honey could, therefore, be considered an aphrodisiac when consumed as mead and, indirectly, because of its food properties which benefit overall good health (see also 5-5 below).

5-4-4 Mandrake (Mandragora officinalum L.)

The mandrake is a member of the Solonaceae family which includes Atropa belladonna (Deadly Nightshade) and Solanum tuberosum (potato). Depictions of
the fruit can be confused with those of the persea, *Mimusops laurifolia* L.) (Manniche 1991: 100-101).

The primary pharmacological constituents are the tropane alkaloids atropine, hyoscyamine and scopolamine. It is known that tropane compounds contribute to relaxation of smooth muscle and hyoscyamine affects the central nervous system, whilst atropine causes mydriasis and is a powerful sedative. *Mandragara* species do not appear in the medical papyri, which pre-dated the arrival of the plant into Egypt, or in the Wb. Dr. (Nunn 1996: 157; Riddle 2010: 65). The Demotic Magical Papyrus of London and Leiden which dates to the third century AD, lists mandrake as an ingredient in a sleeping draught that is capable of causing sleep for two days (Griffith and Thompson (eds.) 1904: I, col. 24, 6-14). If consumed at high dosage, hallucinations, a comatose state and ultimately death can result (Nunn 1996: 157; Riddle 2010: 59-60, 66). At low levels, excitement and delirium occur, first accompanied by a reddening of the skin caused by vasodilation then followed by paleness due to reduced blood pressure. These latter reactions induce sexual attraction, contributing to the stimulation of the libido (Manzano 2005: 32) but the adverse reactions include vomiting and purging which might frustrate any sexual attraction (Riddle 2010: 66).

In later European cultures during the Middle Ages, applying the principle of *similia similibus*, the root of the mandrake was perceived to resemble a human male figure. The Egyptians appear to have ignored the root, preferring instead to inhale the scent of the fruit, a gesture which some experts suggest can be interpreted as the woman offering to make love (Derchain 1975: 77-78; Manniche 1999: 101). The mandrake is probably a unique example of ‘the direct influence of odour on human sexuality’ (Fleischer and Fleischer 1994: 250).

The fruit of the mandrake can be interpreted in two ways in Egyptian culture: in the iconography it is a symbol of love and desire, and in the so-called love poetry it is a metaphor for love and sexual attraction. Mandrakes feature particularly in the royal iconography of the Amarna Period where an emphasis appears to have been placed on the fertility of the royal women. It has been suggested that depictions of a woman collecting and offering mandrake fruit to a man may be interpreted as a metaphor for her virginity and seduction of the king as most
famously portrayed in the late Amarna relief depicting Meritaton offering
mandrake to Smenkhkare (Ägyptisches Museum, Berlin inv. 15000) (Manzano

Mandrakes appear in Eighteenth Dynasty funerary banqueting scenes such as that
of Nakht (TT52) (PM 1.1: 3), Nebamun (EA 37981) and in the Nineteenth
Dynasty tomb of Sennedjem where the deceased is depicted in the fields of Iiaru
in which mandrakes form part of the vegetation (TT 1) (PM 1.1: 9). In the so-
called love poetry, the mandrake fruit was a metaphor for love, joy, fecundity and
specifically the feminine aspects of love, sex and desire. The fruit is compared to
the female breast in the New Kingdom Love Songs of Papyrus Harris 500
(BM10060):

Group I, 3:

‘(How) intoxicating are the plants of my garden!
[The lips] of my beloved are the bud of a lotus,
Her breasts are mandrakes,
And her arms are ornate [...]’ (Trans. Simpson 2003: 309).

In Papyrus Harris 500, 2, 9 mandrakes are offered to Ptah which is interesting
because Ptah is a creator but he creates through the spoken word and not through
sexual reproduction. It is claimed that the psychotropic properties of the plant
were being invoked here to facilitate communicate with the god (Manzano 2005:
33) or perhaps to make the god communicate what the offerant wanted to hear.

5-4-5 Blue lotus (Nymphaea caerulea), White lotus (Nymphaea lotus) and Pink
or Persian Lotus (Nelumbo nucifera)

These three plants are species of water lily but Egyptologists refer to both the blue
and white species of Nymphaea as ‘the lotus’ (Counsell 2010: 51). The name lotus
only applies in the botanical sense to N. nucifera, introduced to Egypt in the
Twenty-seventh Dynasty, and N. lutea (formerly N. pentapetala) from the
American continent. The blue and white Nymphaea species are native to Egypt: N.
caerulea became the emblem of Upper Egypt.

N. caerulea played a significant role in Egyptian religious life, primarily due to its
association with the god Nefertem and the creation myths. Nefertem emerged
from the primeval waters as the youthful sun-god Re in a flower of *N. caerulea*. Utterance 249, line 266, of the Pyramid Texts refers to Nefertem as ‘the lotus-bloom which is at the nose of Re’ (Faulkner 1969: 60-61) and through this association he is also connected with perfume.

The flower of the blue lotus opens in the morning and at dusk, sinks back below the surface whilst the white lotus flowers by night and closes at dawn (Pommerening, Marinova and Hendrickx 2010: 15). The blue lotus flower came to symbolise the daily reappearance and disappearance of the sun-god and, by association, rebirth in the afterlife (Wilkinson 2003: 133, 135). Chapters 81a and 81b of the Book of the Dead are spells to enable the deceased to be reborn or transformed into a lotus:

Spell 81a:

*I am this pure lotus which went forth from the sunshine, which is at the nose of Re; I have descended that I may seek it for Horus, for I am the pure one who issued from the fen* (Trans. Faulkner 1972: 79).

Spell 81b:

*O lotus belonging to the semblance of Nefertum, I am the Man. I know your name, I know your names, you gods, you lords of the realm of the dead, for I am one of you. May you grant that I see the gods who lead the Netherworld, may there be given to me a seat in the realm of the dead in the presence of the lords of the West, may I take my place in the Sacred Land, may I receive offerings in the presence of the lords of eternity, may my soul go forth to every place that it desires, without being held back from the presence of the Great Ennead* (Trans. Faulkner 1972: 79).

It has been claimed that the two *Nymphaea* species have narcotic properties (Bertol, Fineschi, Karch, Mari and Riezzo 2004: 84-85; Emboden 1978: 395-407; 1981: 39-83; 1989: 61-75; Harer 1985: 49-54) due to the presence of alkaloids but there is no scientific evidence to support this claim (Counsell 2010: 54). The blue lotus is depicted in the Turin Erotic Papyrus which suggests it may be used as an aphrodisiac, but when samples of the modern plant were tested for alkaloids, there was no evidence for them in the flowers (Counsell 2010: 53). *N. nucifera* on the other hand, exhibits the presence of two apomorphine derivatives in its flower which are known to act on the central nervous system to increase libido and are used in the treatment of erectile dysfunction possibly acting like a true aphrodisiac as defined in 5-1 (Dula, Bukofzer, Perdok and George 2001: 558-564; Montorsi,
Perani and Anchesi 2003: 203-209). There is, however, no archaeological evidence from Egypt to support the theory that *N. nucifera* was used as an aphrodisiac (Counsell 2010: 51-54).

The blue lotus is frequently depicted held by a female who appears to be smelling the flower. When open, the blue lotus flower gives off a strong scent and blue lotus fragrance inhalation may cause intoxication. Counsell has recommended further studies in this area but the possibility remains that the Egyptians simply appreciated the sweet scent of the plant (2010: 54).

![Fig. 5-7 Thirteenth Dynasty funerary stela of Iy, son of Keki, from Abydos. 1920.10.11. Both men and women are smelling or inhaling lotus scent. © Bolton Library and Museum Service 2013](image)
5-4-6 Opium Poppy (*Papaver somniferum* L.)

The poppy latex contains the analgesics morphine and codeine and the vasodilator papaverine; it is an intoxicant that has narcotic, hallucinogenic and hypnotic effects depending on how it is used (Counsell 2008: 195-197).

The presence of the opium poppy and the use of opium in ancient Egypt are controversial for a number of reasons. Firstly, because much of the evidence is secondary: badly designed depictions of the seed head can be confused with that of the pomegranate. Secondly, the date when opium is first attested in Egypt is disputed and thirdly because the Egyptian name for the plant has not yet been securely identified (Merlin 2003: 297-298, figs. 2, 3; Counsell 2008: 198).

There appears to be only one reference to the possible medicinal use of opium and it forms the basis for arguments that špn is *P. somniferum*: in Papyrus Ebers 782 špnn.w n. w špn is recommended to stop a child crying.

špnn.w n. w špn has been translated as poppy seeds (Wb IV: 444, 17; 445, 5-6; Lefevbre 1956: 110 n.7) whilst špn referred to *P. somniferum album* L. and špnn meant poppy seeds (Charpentier 1981: 1094, 1095). It has been suggested that špn originally pertained to *P. rhoeas* but later became associated with *P. somniferum*; špnn referred to the capsules, flowers or seeds of *P. somniferum* and that špnn-dšr was the red flower of *P. rhoeas* (Gabra 1956: 48-50). However, neither the seeds nor the petals contain opium and they are not used as sedatives (Manniche 1989: 130-132; Counsell 2008: 202). Further arguments against these interpretations are that prescriptions in Ebers 440, 443 and 445 which contain špn, are for external application in the treatment of scalp conditions (Germer 1979: 326-328) and špnn-dšrextract is prescribed, along with carob beans and crushed sycomore, in topical preparations for discharging or infected wounds as an anti-inflammatory and as an analgesic (Papyrus Smith 41, 46) (Sanchez and Meltzer 2012: 250-257; 275; 282-283). A drink said to be based on the poppy and known as špn.tis known to have been made from špn up to the Fourth Dynasty (Germer 1979: 326-328; 1985: 44-46; Charpentier 1981: 1097) but *P. somniferum* is not attested in Egypt at that period (Bisset, Bruhn, Curto, Holmstedt, Nyman and Zenk 1994: 109).
It should be noted that Papyrus Ebers can be dated on the verso to year 9 of Amenhotep I, c. 1514-1494 BC, and it refers to older writings in order to add gravitas to its content (Ghaliounghui 1987: 1-2). It was, therefore, written before any attestable evidence for the opium poppy in Egypt (Bisset et al. 1994: 109). ṣpn does not appear again in medical texts, and it is reasonable to assume that, if the Egyptians had known about the properties of the opium poppy, this would not have been the case (Nunn 1996:156).

Merrillees concluded that opium was being traded from Cyprus to Egypt in the Eighteenth Dynasty. His hypothesis was based on a comparison of the morphology of the opium poppy capsule and Cypriot Base Ring ware I juglets which, when inverted, resemble opium poppy capsules (1962: 287-292, pl. xliii a, b). However, the possibility that opium had been transported in such juglets had been suggested earlier (Muzio 1925: 249-253) and this latter proposition and Merrillees’ hypotheses about the presence of opium in New Kingdom Egypt were challenged. Morphine was used as an indicator for the presence of opium but none was found, the conclusion being drawn was that there is no absolute botanical, chemical or linguistic evidence for P. somniferum in Eighteenth Dynasty Egypt (Bisset et al. 1994: 99-114). Subsequent tests gave unreliable results, whilst analyses of residues in a number of Cypriot Base Ring II juglets from the Seventeenth to the Nineteenth Dynasties, held at Manchester Museum, showed no trace of opium (Fig. 5-8) (Counsell 2008: 198-202, fig. 40).

After collection (see 3-7-1), modern opium latex is dried and transported as solid cakes (White 1989: 157). The long, narrow necks of the Cypriot juglets, some of which have spouts, are more suited to the containment and pouring of liquids rather than solid latex cakes. It could be inferred that their overall shape may be indicative of the original contents i.e. pomegranate juice or wine, but opium is soluble in wine or water and could therefore have been transported in these juglets in solution (Merrillees 1962: 288; 290). No trace of morphine, the indicator for opium, was found in the juglets tested by Bisset et al. but the possibility remains that the vessels may have originally contained traces of morphine but it is now impossible to prove or disprove this. Alternatively, evidence from the Manchester samples indicates that a civetone-based perfume fixative may have been
transported from Southeast Asia via Cyprus to Egypt in these juglets (Counsell 2008: 202-204).

The red-flowering species *P. rhoeas* is known in Egypt from botanical evidence embedded in a clay seal from Meidum dated to the Fourth Dynasty (Germer 1985: 44-46). Four unauthenticated seeds of *P. rhoeas* from the Twelfth Dynasty were recovered from barley at Kahun and these may have been harvested as weeds (Newberry 1890: 50). *P. rhoeas* seeds were also found at Hawara, but these were dated to the Graeco-Roman period (Newberry 1890: 47; Germer 1985: 44). The plant is depicted growing beside water in tomb scenes of gardens such as that in the tomb of Sennedjem (TT I) (PM I: I, (9, iv).

The mauve opium poppy *P. somniferum* was probably not used in medicine until Late Period or Roman times. There is an example of a poppy capsule with the distinct ‘torus’ ring of *P. somniferum* depicted with seeded bread and what appear to be poppy flowers in the Late Period tomb of Psamtek, Royal Physician to Amasis (c. 500 BC) (PM III: ii Memphis II, p.649, Map LXI) which may indicate a medicinal use (Counsell 2008: 202).

The question of when *P. somniferum* opium was introduced to Egypt and what it was used for is therefore, without further primary evidence, still open to question.
5-4-7 Non-intoxicant plants and other sources with possible aphrodisiac properties

Carob (Ceratonia siliqua L.) or locust beans may have been added to food and drink as a sweetener as the pods and seeds are today. The plant also contains protein and starch and is still used in treatments for digestive problems and as an anti-emetic, a use that was indicated in Papyrus Ebers 8, 44-48, 135, 149, 301 (Campbell and David 2010: 27). It is now known that carob contains high levels of histidine which has been shown to be important in male reproduction in mice because deficient histidine levels can cause decreased mating behaviour (Par, Szekeres-Bartho, Buzas, Pap and Falus 2003: 152-158). Whether this is so in human behaviour is unknown.

Anise, basil, coriander, fennel, sage, ginger, garlic and saffron were listed by Taberner as allegedly possessing aphrodisiac properties (1985: 257-262). Ginger (Zingiber officinale) is still used in Jordan to improve male potency (Lev and Amar 2002: 141). Coriander (Coriandrum sativum) was used in Egypt, as it is today, as a carminative (Papyrus Ebers 239) to combat flatulence, but contrary to Taberner’s listing above, it was also included in a recipe for softening an erection i.e. for priapism, the completely opposite effect to that required of an aphrodisiac.

Papyrus Ebers LXXXII:

‘Another: male? seed of coriander, green corn, (it is bandaged therewith.)’ (Trans. Ebbell 1937)

Herbs and spices were also used as food enhancers and as ingredients in other remedies (Ebers 247, 249, 255, 299) (Campbell and David 2010: 27, 36). The relevant properties in these spices are volatile oils which act as irritants when excreted or applied to the genitals by inducing an increased blood supply to the urinary tract mucosae (Sandroni 2001: 306).

5-4-8 Perfume, unguents and incense

Strictly speaking, true ‘perfume’ is a distillation of the volatile components of the scented parts of various plants eg the flowers, bark and leaves. There is no record of distillation being practised in Egypt before the Greco-Roman period so true perfume could not have been produced before then. Instead, composites of
imported resins in an oil or fat base (unguents), imported scented cosmetics or scented ointments from Mesopotamia or the Aegean region were used (Serpico and White 2000: 460-461).

In the context of an aphrodisiac, scent was used to increase sexual attraction in both sexes (Taberner 1985: 247; Manniche 1991: 92-94). The presence of scent could be indicated pictorially by a person sniffing a flower or perfume being poured from a jar but the depiction of the use of scent in scenes of feasting was also a play on words. The word for scent is st|or sty which is believed to have been pronounced the same as sti meaning to engender or beget and sti to shoot, a metaphor for the sex act. Sti can also mean ‘pour’, another metaphor for ejaculation and the sexual act (Westendorff 1967: 139-150; Gardiner 1957: 592-593; Manniche 1991: 96). Scent was thus an important metaphor for the sexual act and regeneration (Manniche 1999: 95-96; Meskell 2002: 153; Manniche 2003: 42-45).

From the early New Kingdom, a ‘dome-shaped object’ began to be depicted on the heads of both men and women in a range of mortuary contexts in tombs, on coffins and mortuary papyri as well as in Gold of Honour ceremonies (Fig. 5-9). These continued to be shown until the Ptolemaic Period (Padgham 2012:1). The cones were originally believed to be solid perfume made of scented fat (unguents) which melted over the head (Ghalioungui 1973: 155; Watterson 1991: 117; Strouhal and Forman 1992: 38, pl.40; Ikram 2001: 164), an assumption which continued until relatively recently, but this theory has now been superseded. The cone is likely to symbolize the b3 of the tomb owner receiving divine offerings on earth whilst the unguent was indirectly associated with the cone:

‘...but only because anointing prepared the body or statue for the presence of the b3’ (Padgham 2012: 98).
Inscriptions at the Ptolemaic temple at Edfu record the making of a unique unguent in ‘the perfume laboratory’ which was originally prepared for Min and later Osiris (Edfu II: 214-215). This unguent was prepared in secret specifically for anointing the limbs and statues of the gods. After application, the statue became blackened with the wood tar which was part of the recipe. This colouration evoked the black Nile silt and was a further allusion to fertility and regeneration (Aufrère 1991: I. 330-331; II. 639-647; Manniche 1999: 45-46).

Unguents and incense are discussed further in Chapter 6 with regard to offerings.
5-4-9 Atmosphere

This can have a profound effect on social gatherings and sexual encounters when combined with other stimuli to the senses such as perfume to create or evoke mood (aromatherapy) relaxing music, sweet and exotic food, alcohol and pleasant surroundings and it is apparent that many of these so-called aphrodisiacs were probably taken as relaxants (Manniche 1999: 9, 92, 96-97). Modern sociological studies indicate that alcohol is used for reasons in addition to quenching thirst and there is no reason to suppose that the ancient Egyptians were any different. 40 The release of anxiety through the use of alcohol or psycho-active substances may have been as important a factor in the use of aphrodisiac substances as it is today.

Many of the substances discussed above have properties that alleviate anxiety and release tension whilst others contain properties which act in a general manner with no specific target and some are merely placebos. Apart from possibly *Nelumbo crucifera*, there do not appear to be any true aphrodisiac properties in the plants and other substances discussed above.

5-4-10 Further relevant considerations

Conceptions of what constitutes a drug have changed over the years. Spinach and water, for example, were considered to be drugs by the Greeks but they are no longer regarded as such. Distinctions between some foods and drugs are no longer clear: lemons are clearly a food but, as a treatment for the dietary deficiency scurvy, they can be classified as a drug (Riddle 1992: XI, 264; 2010: 3).

A great many of the substances and plants discussed in 5-4 above have no specific, identifiable effect in relation to sexual desire but they can have a beneficial effect on general health and consequently sexual health, but little research has been conducted so far to differentiate between general health benefits and improved sexual function (Rowland and Tai 2003: 201-202). The ancient Egyptian agricultural economy produced a plant-based diet of vegetables and fruit that would have satisfied the dietary importance of vegetables as a source of nutrients essential for good health and, by association, a healthy sex life (Leach 1982:13; Wenke 2009: 141-143). Food therapy still plays an important part in the

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40 See Baines (2014).
modern Graeco-Arab and Islamic system of medicine: *L. sativa* is used as a vegetable and the ‘fruits’ (*sic*) of *L. virosa* are utilised but no indication of purpose or method of preparation was stated (Saad and Said 2011: 441-475).

Lettuce leaves are known to be a source of ascorbic acid (vitamin C) (NHS 2007) and the minimum daily requirement of this vitamin,\(^{41}\) important in the prevention of scurvy, can be more readily consumed in a portion of vegetables than in alternative forms of, for example, the bulk consumption of milk to attain the same level of required nutrition. Although low in energy value, protein and fat (Ryder 2003: 376), the plant also contains traces of vitamins Thiamin (B1), Riboflavin (B2) and Folic Acid (B9) (de Vries 1997: 165) and iron (van der Veen 1998: 108; Ryder 2003: 377) whilst the seed contains vitamin E which is reputed, but not proven, to be an aphrodisiac (Clarke’s Analysis of Drugs and Poisons 2011). Green, leafy vegetables also contain vitamin E in the form of α tocopherol which has been shown to have a therapeutic value (Merck Index www.medicinescomplete.com). The bulk of the lettuce plant consists of water and fibre and when consumed in quantity it is known to have a diuretic effect (Riddle 1992: 290-1). A summarised comparison of the most important nutritional values in modern *Lactuca* species is given in Table 5-2.

<table>
<thead>
<tr>
<th>Minerals g</th>
<th>Vitamins A (μg)</th>
<th>Water %</th>
<th>Fibre g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ca</td>
<td>Crisp</td>
<td>P</td>
<td>Fe</td>
</tr>
<tr>
<td></td>
<td>Butter</td>
<td>35  26</td>
<td>1.8</td>
</tr>
<tr>
<td>Cos</td>
<td>44  35  1.3</td>
<td>9</td>
<td>277</td>
</tr>
<tr>
<td>Leaf</td>
<td>68  25  1.4</td>
<td>9</td>
<td>264</td>
</tr>
</tbody>
</table>

Table 5-2
Nutritional values for modern *Lactuca* species.
Values are per 100g of edible vegetable.
(Adapted from Ryder 1999: 7)

However, it should be emphasised that the above analyses relate to modern varieties of lettuce that have been bred for their nutritional properties which may be greater than those available to the ancient Egyptians. In the absence of any archaeo-botanical specimens for comparable analysis, this information is

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\(^{41}\) Since Leach (1982: 13) quoted a daily requirement of 30mg/day this has been revised to 40mg/day (NHS 2007).
presented as an illustration of the current health benefits of the vegetable. Although lettuce was consumed as a staple food in Egypt, the nutritional effects would have been general rather than specifically targeted.

5-4-11 Dosages and the work of Samorini

Although very small quantities of volume were measured in units of ro (app. 0.015 litre.) (Manniche: 1989: 63), the preferred Egyptian measurement in prescriptive formulae was by volume expressed as fractions in relative proportions, not in total quantities. Although the mixture would be uniform in composition at any one time, the total dose to be administered was not indicated and, therefore, the safe use of drugs was not possible unless a standard reference volume was known to the Egyptian physician (Nunn 1996: 140-143).

The amount taken and the frequency of ingestion of any substance, including phytochemicals, have a bearing on the effect of that substance: there is also a fine line between a drug and a poison and, whilst a small amount may have little or no effect, too much could result in poisoning, addiction or death. The part used and the age of the plant, time of harvesting, and the environmental conditions of growing also affect the amount of active ingredient involved (Sandroni 2001: 306; Riddle 2010: 66, 137-138; Saad and Said 2011: 503) (see 2-6). It is here that the importance of correct identification of the plants involved has such significance.

Cases of allergic reaction and poisoning through ingesting and injecting unknown quantities of extracts of L. virosa have been reported (Boe 1876: 376; Mullins and Horowitz 1998: 290-291; Spadari, Pommier, Canioni, Arditti, David and Valli 2003: 702-3). The symptoms include ‘...stupor, depressed respiration, coma and even death.’ The chemistry of L. virosa is well documented in relation to its use in modern Western herbal medicine, but it is still unclear which are the active components and there is no published evidence to support its continued use (RPSGB 2013: 746-747).

Although it is generally accepted in Egyptology that L. sativa is the plant depicted in the iconography, no peer-reviewed research appears to have been conducted into the dosage of lettuce or its extract that is required to create an aphrodisiac response. The independent researcher Giorgio Samorini has conducted some
work on the lettuce in ancient Egypt (http://samorini.it/site). Samorini believes the lettuce in the iconography is *L. serriola* (synonymous with *L. sativa*). He claims to have shown that a low dosage of 1 gm. of lactucarium induced calm and an analgesic effect, but that once the amount was increased to 2-3 gm. the stimulant tropane alkaloids predominated. However, this result appears to be founded upon observations of the reactions to different dosages of lactucarium by one man who was already taking the substance as an analgesic for rheumatism. There does not appear to have been any control in place. The observations do not appear to have been peer reviewed, replicated or submitted to rigorous testing and are not properly published (the only publications being Samorini 2003-2004: 73-84 and 2006: 49-55). As Samorini was unwilling to supply the writer with any further information about his work, it has been discounted here.

Dosages of *L. virosa* for herbal use have been calculated according to the condition treated and which part of the plant is used, but there is no recommendation for its use as an aphrodisiac (Barnes, Anderson and Phillipson 2013: 266-267).

**5-4-12 Properties of lettuce as an aphrodisiac**

To be classified as an aphrodisiac some or any of the properties of *L. sativa* or *L. virosa* must be substances that satisfy the definition of aphrodisiac as defined in the COED (see 5-1) i.e. they must contain a substance that increases sexual desire. In view of the widespread acceptance in the literature that lettuce was offered to Min as an aphrodisiac, it is to be expected that active aphrodisiac agents are to be found in the plant.

Low amounts, measured in nanograms, of morphine have been detected in *Lactuca* species but the concentrations are so low that there is no obvious pharmacological effect (Barnes, Anderson and Phillipson 2013: 597).

The two active compounds in the latex of *L. sativa* and *L. virosa* are lactucin and its derivative, lactucopicrin. Both compounds have sedative and analgesic properties which act on the central nervous system and are in part responsible for the bitter taste of the lettuce latex. The analgesic effects have been demonstrated for both compounds at 15 and 30 mg/kg in controlled tests using mice.

In modern herbal medicine, a clear distinction is made between the uses of *L. viroso* and *L. sativa*. *L. viroso* is not used as a food but is used traditionally as a sedative in cough and sleep remedies; to calm children, for muscular and joint pain; specifically for irritable coughs and insomnia; and for treating priapism or nymphomania (Royal Pharmaceutical Society of Great Britain 2013: 746). The fact that *L. viroso* is used to treat the last two conditions contra-indicates its use as an aphrodisiac.

The evidence presented in Table 5-I indicates that a distinction is also made between the uses of *L. viroso* and *L. sativa* in Middle Eastern medicine. In either culture, *L. sativa* is more likely to be consumed nowadays because the bitter-tasting, sedative compounds have been significantly reduced by selective breeding to improve the taste specifically for the food market (Ryder 1999: 41).

### 5-5 The Contendings of Horus and Seth

Gauthier (1931: 167 n.1) stated that a belief in lettuce as an aphrodisiac was ‘...absolument erronée.’ He considered that such a belief stemmed from ‘... une ancienne légende pharaonique...’ but gave no reference for the ‘légende’. It is probable that he was referring to the version, one of many, of the important Horus and Seth myth in the Twentieth Dynasty Papyrus Chester Beatty or its antecedent, a longer, Middle Kingdom papyrus from Kahun and Gurob (Griffith 1898). It is examined here as part of the argument against lettuce offered as an aphrodisiac.

The myth is one of many variations concerning Horus and Seth who dispute which of them should succeed to the throne of Osiris, which suggests an important point that the automatic right of a son to inherit his father’s throne did not exist when the myth came into existence.

This is a secular version of a sacred story compiled from a number of similar myths that were written down in the Nineteenth Dynasty but the division into secular and religious is a distinction the ancient Egyptians may not have recognised. It is a composite myth with many diverging elements that have

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42 For which see Griffiths 1960.
become distorted by attempts to interpret them, genealogy being one area of confusion (Assmann 2001: 141).

One version of the myth relates how Seth made homosexual advances on Horus, who caught the semen of Seth in his hand. When Horus told Isis of the attack, she cut off the contaminated hand to magically replace it with a new, clean hand. She then threw the amputated hand into ‘the water’ (Gardiner 1931: 22-23, 11, vii). Isis then caused Horus to ejaculate and took his semen to the garden and it is at this point in the text that the relevant passage occurs:

‘Thereupon Isis went with the seed of Horus in the morning to the garden of Seth.
And she spake unto the gardener of Seth: What herb is it that Seth doth eat here with thee?
And the gardener spake unto her: He doth not eat any herb here with me except lettuces. And Isis put the seed of Horus upon them.
And Seth came after his fashion of every day, and he ate the lettuces which he used regularly to eat.
And he arose pregnant with the seed of Horus.’

When Horus and Seth put their respective cases before the Ennead about which of them should inherit the throne of Osiris, Seth put his case first, but Horus claimed that all that Seth said was false. It was suggested that their semen should be called upon to answer and where the answers came from would reveal which of them spoke the truth. Thoth called the semen of Seth which answered from the water whence it had been thrown with the contaminated hand. When called by Thoth, the semen of Horus asked where it should emerge and Thoth said from his (Seth’s) ear, but the voice refused saying it was a ‘divine effluence’. Thoth then told the semen to come from Seth’s forehead whereupon the semen of Horus emerged as a gold disc on Seth’s head.

‘Thereupon Horus made an oath to God, saying: False is all that which Seth hath said, Let the seed of Seth be summoned, that we may see whence it will answer. And let mine own be summoned, that we may see whence it will answer.’
Thereupon Thoth, the lord of divine words, the scribe of truth of the Ennead, placed his hand upon the arm of Horus, and he said: Come forth thou seed of Seth!

And it answered to him from the water in the fen.

Thereupon Thoth placed his hand upon the arm of Seth, and he said: Come forth, thou seed of Horus!

Thereupon it spake unto him: Where shall I come forth?

Thereupon Thoth spake unto it: Come forth from his ear!

And it spake unto him: Shall I come forth from his ear, I who am divine effluence?

Thereupon Thoth spake unto it: Come forth from his forehead!

Thereupon it came forth as a sun of gold upon the head of Seth’.


Seth, furious at being deceived and proven to be in the wrong, tried to take the disc but Thoth took it and put it on his own head where it symbolised the moon and the eye of Horus, which had been taken by Seth (see 5-3 above) (Gardiner 1931: 21-23, 11-12).

A later Ptolemaic text at Edfu addressed to Min-Horus, alludes to the lettuce-eating episode and consolidates and confirms the fragmented parts of the myth:

‘I bring you the beautiful green plants on which you have emitted your seed, which is hidden there, which the effeminate one has swallowed. Your seed belongs to him and he will conceive for you a son, who will come forth from his forehead.’

(Edfou II, 44) (Trans. te Velde 1967: 44).

A second text from Edfu, accompanied by a depiction of Min and Isis with the king offering two lettuces, provides further evidence about fertility and lettuce relative to the passage in the Contendings:

‘Offering lettuces. For recitation. The beautiful plants, the herbage from the district, rejoice thou at seeing it. Cause thy seed to enter the body of the enemy, that he may be pregnant, and that thy son may come forth from his forehead.’

(Edfou I, 82, 5-6).
This implies that the Egyptians believed that the lettuce latex resembled semen. Semen was linked to the fertility powers of Min which were evident when Seth became pregnant with the semen of Horus (Gardiner 1931: 22, (12)). Griffiths (1960: 46) compares lettuce latex with seminal fluid but his interpretation depends on Min at Edfu being identified with Horus which, Griffiths maintains, can be correctly demonstrated from other Edfu texts. Bleeker confirmed that the aspect of Min-Horus the Strong’ or Mnw-Nḥt was the aspect of Min at Edfu (1956: 11-18). Griffiths (1960: 45-46) further interprets the lettuce as being associated with ‘...sexual fertility’ and says that ‘obviously’ Seth was thought to increase his famous ‘sexual strength’ by consuming the lettuce. The ‘sexual strength’ of Seth has been interpreted as sexual potency or fertility (te Velde 1967: 38).

Keimer (1924b: 140-143) primarily attributed the connection between Min and lettuce to the resemblance of the latex to milk, a symbol of fertility, and only secondarily as bearing a resemblance to semen, a view also held by Bleeker (1956: 52). From Keimer’s and Bleeker’s observations, it appears that the link of milk and lettuce latex with fertility might have had a greater significance for the Egyptians than an association of the latex with semen and aphrodisiacs. Gardiner supports Keimer’s ideas about lettuce and fertility, saying they are substantiated by the passage XI: x in the Contendings of Horus and Seth because swallowing the semen of Horus made Seth pregnant. Gardiner then cites as further evidence the texts E. I, 82 and E. II, 44 quoted above (1931: 22, n1).

Both the Twelfth Dynasty fragment of this myth and the Contendings of Horus and Seth have been interpreted as having homosexual overtones but they have also been taken as a symbol of the defeat or overcoming of an enemy (Parkinson 1995: 70, 74-76). Other interpretations suggest that when Min was placed on the garden or hḥw was discussed in 4-10, he assumed the role of Horus triumphant over Seth, that is to say of good over evil (Boze 1996: 94, 251) or, alternatively, that it is a parody of the offering scene where the sperm of Horus represents a libation (Patanè 1982: 86). Neither of the last two theories has received much attention in the literature.
5-6 Summary

Perhaps the most important finding in this chapter is that, particularly in ancient Egyptian studies, very little appears to be known about either species of lettuce under consideration (*L. sativa* and *L. virosa*) and whether or not they possess any aphrodisiac properties. Hardly any research is being undertaken to investigate the properties of either plant because they are not part of mainstream medicine. Consequently, the assumption that lettuce is an aphrodisiac has been accepted almost without question, it still persists and needs further research.

Other substances are recorded as being used as aphrodisiacs by the Egyptians but there does not appear to be any discrete, demonstrable evidence for aphrodisiac properties in *L. sativa*. There is, however, evidence to demonstrate that the plant contains a mild sedative and is a beneficial food for general health which may assist in boosting libido but, in modern Middle Eastern systems of medicine, lettuce is rarely recommended as an aphrodisiac or for male sexual problems. Current research in the Middle East is focusing upon the sedative and hypnotic effects of lettuce seed oil for sleep disorders or anxiety states but there appears to be no interest from Western mainstream medicine.

Lettuce was frequently included in funerary offerings both as a vegetable and as a symbol of regeneration but it is not depicted in scenes where an aphrodisiac might be expected. Plants with a better claim to being aphrodisiac, such as mandrake, have been shown to be depicted in relevant scenes.

Although the evidence is, at present, inconclusive, lettuce is not scientifically proven to be an aphrodisiac. Due to its appearance, rapid growth and spurting latex the offering and consumption of lettuce may have been thought to increase sexual prowess by association. (Ryder 2003: 278). However, the ancient Egyptians often held views unique to themselves which had no scientific foundation: their systems of cosmology and cosmogony, for instance, were unique to Egypt (Lesko 2004: 88-122; Baines 2004: 124). Belief in lettuce as an aphrodisiac may be another example of the uniqueness of Egyptian thought—lettuce was an aphrodisiac because the Egyptians believed it was.
CHAPTER 6
OFFERINGS TO MIN

6 - 1 Introduction

The first part of this chapter examines some of the offerings to Min as made by the king during rituals and festivals in the temples and the responses made by the god. The second part examines some of the offerings and dedications made by private, i.e. non-royal, individuals in a variety of situations.

An analysis of the five most frequent offerings in rituals associated with the king during the Ramesside period is taken as a basis: these were - in descending order - incense and libation, wine, flowers, ointment and ḫḫ. Together they made up 80% of the (approximately) 2000 offering scenes analysed in the research, in which lettuce was included with flowers (Eaton: 2013: 161). However, lettuce is treated separately here along with ḫḫ because they were both unique to Min. The other categories of offering will be examined in the light of their relationship to Min. The performance and practice of the temple rituals was examined in detail by Eaton (2013) and will only be discussed here where necessary. The aphrodisiac potential of a number of the offerings discussed was examined in chapter 5.

6-2 Importance of Ptolemaic temple inscriptions

Related texts and inscriptions from the Sixth Dynasty onward, when Min is first attested receiving offerings from the king, are considered. However, texts relating to these early offerings either were not included, may not have survived or the earlier transmission of the texts may not have been as explicit as later ones, such as those inscribed on temples of the Ptolemaic Period (Finnestad 2005: 202).

Egypt’s Ptolemaic temples are at the end of a state temple-building tradition that can be traced back to at least the Early Dynastic Period. Although the stone built state temples constructed after the Second Intermediate Period preserved a large part of their inscriptions, representation took precedence over the language in New Kingdom inscriptions. Consequently, the New Kingdom illustrative programme focused on depictions because there was not the impetus at that time to fill all available spaces with text as in the Ptolemaic temples (Cauville 2012: 7).
The detailed information and refined use of language in the major Ptolemaic temples is not just a source for temple rituals and routines (Fairman: 1954). The texts contain lists of offerings which detail by whom and to whom they were offered and some information about why they were presented. In relation to Min and the lettuce, two of the most informative sources for these texts are the inscriptions of Edfu and Dendera (Watterson 1998: 45-46).

From the start of the Late Period to the beginning of the Ptolemaic Period, Egypt was subject to invasions and periodic foreign rule that resulted in a new consciousness of identity and a fear that Egyptian cultural memory would be assimilated into other cultures (Assmann 1996: 339-345; 2011: 159-160). This awareness created something which has been referred to as ‘...Angst des Vergessens...’ (Kees 1941: 415) and, during the Ptolemaic Period, this new consciousness of identity led to unique developments in the decorative programme of the temples, starting in 237 BC with the new temple at Edfu (Wetjeset-Hor, The Place where Horus is Extolled). The Ptolemaic decorative programme became a vehicle for protecting Egyptian culture from the profanity of any future invaders and for committing cultural memory to posterity, referred to as ‘...built memory...’ (Assmann 2011: 160). Hitherto unrecorded details or details recorded in books now lost to posterity were inscribed on protected locations within the temples (Finnestad 2005:194-196). The programme must, however, be viewed with caution because each temple had its own agenda, not all festivals were depicted and the relative importance of each temple, the importance of each text and its liturgical value must be taken into account. Gaps or omissions in the inscriptions, which cause problems for modern translators, were probably filled for the temple officiants from information contained in the temple libraries (Zivie-Coche 2004: 94-95). At this time, there was also a large increase in the number of hieroglyphs in use which continued into the Roman Period and some individual temples developed their own writing systems (Fairman 1945: 55-57; Hornung 1986: 422). The problems of deciphering, translating and interpreting the signs and inscriptions have caused problems to modern Egyptologists, resulting in a concomitant slowing of the production of reliable publications.
With non-Egyptian kings ruling Egypt from the Hellenised city of Alexandria, the seat of government was effectively distanced from the rest of the country and, as the political and military influence of Egypt declined, the priesthood and state temples became keepers of the Egyptian cultural memory through this accumulation of knowledge in the inscriptions. Both the priesthood and rulers recognised that a continuity with the past was essential to the legitimisation of foreign kings and consequently the priestly class was able to utilise its knowledge to realise the power it could exert over the new rulers (Baines 1989: 131). This was effected in part through references to ancient rituals and religious texts, the priesthood now being the only body with the knowledge to read and comprehend such works (Gozzoli 2009: 306-308).

Hatshepsut’s pictorial justification of her kingship in the Eighteenth Dynasty is an earlier example of the strategic use of offering scenes. Hatshepsut was a daughter of a king but Ahmes, her mother, was not a king’s daughter – a pre-requisite for legitimacy. Hatshepsut justified her kingship through her blood lines as a daughter of a king, sister of a king, descendant of Ahmose-Nefertari who had been deified, and she was a God’s Wife of Amun. She had depictions of Amun choosing Ahmes to be the mother of a king carved in her mortuary temple at Deir el-Bahri and used depictions of herself offering to Amun, amongst other gods, to further justify her rule in the eyes of the gods and the priests (PM II, 348: 17, 354 (59); Naville 1896: II, 9-10, pl. xxxvi, xlvi-xliix [left]). This pictorial justification was a strategy (it was not legitimisation) that would be used much later by the Ptolemies to bolster their own authority. When depicted offering lettuce to Min, the Ptolemies were not only seen to officiate in Egyptian ceremonies but they were associated with a god who played an important role in the kingship and prosperity of Egypt (Edfou IX: pls. xv, xxxib; xxxiia; xlb).

6-3 Ideology of offerings
Two fundamental concepts lie behind the ritual of the types of offering and their relationship with the Egyptian view of the world. These concepts concern the ‘Eye of Horus’ and the maintenance of ṭn all its forms (Englund 2002: 279-286).
‘Eye of Horus’ is used to denote a wide variety of offerings and is synonymous with the re-establishment of order after the disruption in the myth of the Conflict of Horus and Seth, the many variants of which derive in part from references in the Pyramid Texts to earlier, unrecorded myths (for which see Griffiths 1960). One version of the complex myth may be summarised as follows: Seth, the epitome of chaos and violence, murdered his brother Osiris, king of the gods, and scattered his body parts across Egypt. Isis, wife and sister of Osiris, re-assembled the body parts and revivified her husband. She then conceived Horus. As an adult, Horus fought with Seth for the right to inherit the kingship and in the long running feud, Seth blinded one eye of Horus, who castrated Seth in revenge. This may be an allusion to exacting a control over the excessive and unnatural sexual tendencies of Seth.

A different version describes how the Eye was stolen by Seth, and the king returns the Eye to Horus as in PT 35:

‘The messenger of Horus loves me and has brought his eye...’

Alternatively, PT 578-9 and PT 591b could suggest that Horus may have forcibly retrieved the eye himself from Seth:

‘...he has wrested his eye from him...’ (Trans. Faulkner 1969)

PTs 36, 39:

‘...the Eye of Horus which was wrested from Seth...’ (Trans. Faulkner 1969)

PT 97:

‘...the eye of Horus which he seized from Seth...’ (Trans. Faulkner 1969)

Horus then presents the eye back to the king as the Osiris-King to protect the king against Seth in PT 591:

‘Horus has wrested his eye from Seth, he has given it to you...’

(Trans. Faulkner 1969)

The eye thus became the symbol of order restored after chaos and the principle of do ut des was established. The various accounts and variants of the composite Osiris, Seth and Horus myths are thereby intertwined. Through the restoration and
regeneration of the Eye, it became a symbol of the regeneration of life and by association all offerings became included in that symbolism. The appellation of Eye of Horus indicates the divine nature of the substance and the part that it plays in the preservation of life. The presentation of the Eye of Horus is, therefore, the *sine qua non* of offerings and therefore was fit for the gods (Griffith 1960: 1-7; Englund 2001: 564-565).

6-4 Temple offerings by the king

Theoretically, all ritual offerings in every temple throughout the country were made by the king acting as an intermediary between Egypt and the gods to maintain, preserve and strengthen the established order, based on the principle of *do ut des* or reciprocity. In reality, the priests acted on the king’s behalf. Offerings were intended to prevent the forces of chaos (*isfet*) from overcoming the established order of the universe (*m<sup>3</sup>*<sup>t</sup>) and to demonstrate that the king, as the mediator between humanity and the gods, was grateful for and was intent upon preserving the (Egyptian) world order (Englund 2001: 564-565).

The desirable powers and qualities of the offerings could be assimilated by the offerant through a combination of the consumption of the offering or sacrifice and the power of sympathetic magic (Junker 1911: 67-77; Ritner 2008: 102-110). After the symbolic presentation to the gods and statues, whether in the temple, chapel precincts, offerings of food eventually went to feed the temple officials making the offerings (Fairman 1954: 180-181; Englund 2001: 566) and it has been demonstrated that the expression ‘*rdi-m-hwt*’ is a metaphor for ‘to eat offerings’, to justify the claim that the offerings were re-distributed for human consumption (Wilson 1997: 595).

As was to be expected, offerings to Min were concerned with securing regeneration, fertility, ensuring the prosperity of agriculture, the continuation of the kingship, protection of miners and travellers and the procurement of products from foreign lands. Many of the amounts and types of offerings to Min at his festivals were related to the purpose of the festivals and to the time of year when

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43 The ritual of the presentation of *m<sup>3</sup>*<sup>t</sup> by the king, first attested in the Eighteenth Dynasty (Teeter 1997: 2), is not considered here although the name of the goddess was incorporated into kings’ *nbt<sup>y</sup>* and Horus names as early as the Fourth Dynasty.
the festivals were held. The Festival of Min at Thebes was initially believed to be of little importance because, in comparison with other festivals for gods such as Sokar, the amount and variety of agricultural produce offered was comparatively small (Nelson 1934: 20). However, the reasons for the paucity of these endowments can be explained by the times of year when the main festivals of Min were held. *Pr.t Mnw* was celebrated in Pakhons, the first month of the harvest season of Shomu, but before the actual harvesting commenced. To this end, the symbolic cutting of the first sheaf of grain by the king was an important part of the ritual. Other festivals (see 2-11, Table 2-1) were held in the growing season of Peret. In complete contrast, the festivals of Osiris and Sokar occurred at the end of Akhet, the inundation season, after the crops had been harvested and accounted for (Eaton 2013: 115-117).

The rituals of offering can be divided into two overlapping sequences: the Daily Ritual, which consisted of waking, bathing and clothing the cult statue of the god together with the Ritual of the Royal Ancestors, when the god received food (Eaton 2013: 46-47). It is uncertain in which order these acts were performed because no one sequential order for the episodes is recorded, which suggests that a logical sequence was not the first priority for recording the cycles. The second set of rituals involved specific festivals at which a series of events and offerings took place in the temples (Eaton 2013: 41-43, 57,108) and outside the temenos in festivals such as *pr.t Mnw*.45

‘What is essential in the ceremony is the precise and faultless execution in accordance with rules, of numerous rites and recitations.’


This was the ideal but economics, politics, the deterioration of monuments, changes and decline in rituals, together with the fallability of human nature and a tendency of modern scholars to oversimplify the rituals by trying to impose a sequence of events, have all contributed to the erosion of this ideal (Eaton 1975: 18-19).

44 Also referred to as Ritual of Amenhotep I after the principal recipient in two Nineteenth Dynasty records of the ritual: Papyrus Chester Beatty IX (pBM 10689) (Gardiner 1935: 78-106, pls. 50-61) and pCairo-Turin. (Golenischev 1927: 134-156, pls. xxiv-xxvii; Bacchi: 1942).
45 A detailed study of the progression and performance of these rituals can be found in Eaton (2013).
6-5 Offerings to Min

There is no strict sequential order for depicting the ritual offering of objects, many offerings were used in a variety of rituals and had more than one meaning and could be presented to more than one deity. The first five of the following are some of the more important ones attested as being offered to Min as well as to other deities.

6-5-1 Incense

Censing and libating were major episodes in the daily purification rituals and during all festival and mortuary rituals. In the daily rituals, they were associated with the wakening of the god and creating a sacred space around the deity (fig. 6-1). In addition to repelling demons and creating a serene, pure atmosphere in preparation for the arrival of the deity, on a more practical level fumigating with incense kept out every-day smells from the fields and from the laboratories where the incense and unguents were made (Eaton 2013: 163).

The offerant of the incense, either the king or an Iunmutef priest, was known as the thurifier. The incense was offered in a censer terminating in one end with the head of a falcon and at the other with a hand. A pail-shaped receptacle was fixed to the arm of the censer to contain the incense (Fig. 6-1). The pail contained burning charcoal on which pellets of incense were thrown, an act which represented the sun moving across the sky (Eaton 2013: 164). The pail-shaped vessel (Gardiner sign R7) is an ideogram or a determinative in sun (Urk IV. 943, 12).

The scented incense vapour permeated the sanctuary and temple:

*Take the incense which diffuses over the flame; it is placed on the arms of the gods. It transforms your heart through its perfection. I bring the incense to make your temple festive; I appease your body (Edfou IV, 152; Dendera XI, 157).*

*The temple is filled with the scent of incense (Edfou IV, 138).*
Incense spreads throughout your sanctuary, it sanctifies your throne, it purifies your ka from evil (Philae II, 308). (Trans. Cauville 2012: 36-37)

Fig. 6-1
Ramesses III makes a libation and offers incense to Min ka-mwt.f.
Second court, east wall, Medinet Habu.
(Adapted from Epigraphic Survey 1940, pl. 207)

Incense was made from the resins obtained as a solidified exudate from a number of species of tree or shrub, primarily frankincense (Boswellia species) and myrrh (Commiphora species) from Africa and Arabia (see below), particularly in Nubia and Punt but which species of either was used in Egypt is not yet verified (Serpico 2000: 434-436, 438-443; 456-459). The caravan routes bringing incense from the south to Egypt travelled through Coptos and Elkab and the expeditions and incense thus came under the protection of Min of Coptos and Nekhbet of Elkab.

These resins were stored and prepared in the temples in special rooms referred to as ‘laboratories’.
The resins of Punt transformed by the work of laboratory assistants

The aromatic scent of many resins when burned made them an essential part of Egyptian incense, along with flowers, bark, roots and leaves which were burned on charcoal. The scent of the vapour produced by the slow burning resins was believed to be that of the gods who manifested themselves in this aura of their own making. The word snfris usually translated as a generic term for incense (see, for example, Cauville 2012: 36) but it was suggested the word may refer to a specific plant, an as yet unidentified species of the Pistacia genus from the Mediterranean area (Loret 1949). This theory is now supported by analyses of pistacia resin from amphorae discovered in a Late Bronze Age shipwreck at Ulu Burun, Turkey and in imported Canaanite amphorae found at Tell el-Amarna which indicate a thriving trade in the resin into Egypt (Serpico and White 1998: 1038). Further analysis of residues in bowls found at Amarna demonstrate that pistacia resin had been burned in them as incense. The conclusion reached was that, in the New Kingdom at least, the word snfrefferred to pistacia resin that was used as incense (Serpico 1996).

Incense promoted an erection in the ram-deity of Mendes:

*Take the incense, ram lord of rams; it pricks up your phallus. Ram ejaculator transcended by the odour of incense, you inseminate the women, you create an embryo for the infertile woman (Edfou IV, 303)*
(Trans. Cauville 2012: 37)

At Karnak in the Barque Chapel of Hatshepsut, incense is offered to the ithyphallic Amun-Re, presumably with the same intention (Fig. 6-2).
In return for incense, the king received the lands that produced the resin, the resins themselves, dominion over inhabitants of the foreign lands that produced the resins, purification and the uraeus, symbol of his kingship and through which the goddess, Nekhbet protected him:

I give you Punt and its contents (Dendara XII, 156)

I give the inhabitants of the land of spices who bring you their tribute (Dendara XI, 112)

I give you the royal palace purified and devoid of any miasma (Edfou VII, 172)

I receive your incense that you place upon the flames; I install your terror in foreign lands (Edfou V, 197)

I give you the vulture-goddess protecting your body (Edfou VII, 109) (Trans. Cauville 2012: 38)
6-5-2 Libations

Wine was offered in the same *nw*-jars as water and represented the meal of the god. The evidence for the ingredients and production of wine were briefly discussed in 5-4-1.

The offering was frequently associated with libating (Fig. 6-1) and depictions of the offering of wine are often described as ‘*irt khḥ*’ (doing libation) (Eaton 2013: 163). At Medinet Habu, at the beginning of the procession, a small, kneeling statuette of Ramesses III is depicted on the reposoir at the feet of *Amun-Re-kꜣ-mwt.f* offering two *nw*-jars of wine. The god is referred to as Min by Eaton (2013: 116) (Epigraphic Survey 1940: pl. 200).

The king could pour wine or water over offering tables or onto the ground. This was not intended to be a display of conspicuous consumption but represented the return of the produce of the earth to its maker, Geb:

‘*Good wine, I pour it on the ground*’ (*Dendera* XIII, 276)

Pouring water onto an altar, a statue or the ground also served as a purification rite. As a drink, it purified the inside of the god but the chief allusion was to the beneficial effect that the inundation brought to Egypt and the rejuvenating power of nature (Vassilika 1989: 105; Poo 2010: 4).

The king received in return for his libations

‘*…the lands of the west that are bringing you their tributes.*’ (*Edfou* II, 98) (Trans. Cauville 2012: 45, 48)

The liquids all provided nutrients and all offerings of liquids were thereby connected with regeneration or rejuvenating (Poo 2010: 5).

6-5-3 Flowers and bouquets

Flowers and bouquets had been offered to the dead, the gods and the king since the Old Kingdom, but from the New Kingdom and during the Late Period, larger
bouquets of flowers were offered (Mostafa 1994: 243). Three different forms of bouquet have been identified from tomb paintings and temple reliefs:

- A large, sacred, columnar bouquet, known as ‘nhw, was carried in pr.t Mnw and other processions (Fig. 6-3, Fig. 6-4) or was presented to Min and other deities.
- A middle-size bouquet which could be laid on an offering table or on the floor (Fig. 6-5, Fig. 6-6).
- A small bouquet which could be hand-held or which may have been part of a columnar bouquet that was broken down for use by individuals and presented to a statue of a deity (Fig. 6-6, Fig. 6-7) (Dittmar 1986: 125-132; Exell 2009: 86-87).

The offering of one of the sacred ‘nhwbouquets guaranteed the king triumph over his enemies and their submission to his rule. It also bestowed on the king the role of ‘nurturer of the land and keeper of the order of nature’ (Vassilikova 1989: 111).

Bouquets offered to the deceased symbolised the hope of an afterlife. The offerer could, therefore, be described as bestowing life (LÄ 837-840; Dittmar 1986: 103-105)

Bouquets were important in the Daily Rituals and featured even more prominently in ritual festivals. Although each species of flower that made up the bouquet had a symbolism of its own, apart from papyrus and lettuce it was rarely named (Eaton 2013: 171). The complete bouquet symbolised life and regeneration, possibly due to its resemblance to an ‘nh in shape and thereby being a pun on the word for life (el-Maenshawy 2012: 57-58). Lettuce was also, but not always, included (Keimer 1924a: 123-124).

The plants were grown by temple gardeners who made fresh bouquets each day from rnp.t i.e. fresh, green plants, particularly lotus and papyrus. The stela of Nfr-mnw found at Sheikh Abd el-Qurna, which probably dates from the time of Thutmose III, records:

‘…the sculptor [who forms with] flowers who fills [his] two arms [with] all fresh plants, who makes the bouquet of the Lord of the Two Lands as [the requirement of his father] A[mon] re…[overseer] of the garden in
the inundated land at Thebes, chief of what [his majesty] has created [from the plants] of his spoil in the recreation place of [Amun-re] /// [Nfr-M]nw.’

(Cairo Museum TN. 20.3.25.3)

The shorter bouquets were formed of two parts: the upper part consisted of blue lotus and buds surrounded by poppy flowers. The framework consisted of palm leaf strips, reeds and grass to give a firm handhold for presenting the construction. The columnar bouquets (also known as stick bouquets) were also made of two parts: the head consisted of papyrus, cornflower, poppy and other blossoms plus fruit. The long lower part, which was the height of its bearer, was constructed of papyrus stems and palm strips. A florist’s workshop is depicted on blocks from the temple east of Karnak of Amenophis IV/Akhenaten that are now in Luxor Museum (el-Maenshawy 2012: 57-61).

The gardeners grew the flowers, made up the bouquets and delivered them for the great festivals and presentation to Amun. According to the stela of Nfr-mnw, the prestigious position of temple gardener seems to have been hereditary with access to decorating the private rooms in the king’s palace. Nakht, the owner of TT161 mentioned in 3-7-1 and figure 3-12 above, was a Gardener of Amun and a Bearer of the Floral Offerings to Amun (Gardiner 1947: I, 66).

Tomb C4 in the Theban necropolis had been lost and was rediscovered in the 1960s. The owner, Mrj-m¢et, a w¢b priest, is shown in figure 6-5 receiving offerings from his relative but he is referred to in the quotation below as female (Manniche 1988a: pl. 32, no. 53). Two types of bouquet are illustrated: a short, hand-held one and a larger one on the offering table. The manner of presentation of the larger bouquet is shown in figure 6-6.

‘Receiving the bouquet of your (?) noble (?) god Amun…praise by M¢et, daughter of Re¢. We give to you all good and pure things, vegetables, all herbs and sweet smelling plants for your k3 they being twice pure.’

(Trans. Manniche 1988a)
Fig. 6-3.
Min *k3-mwt.f* carried in procession with ‘*nhw*bouquets at either end of the reposoir.
Second court, north wall, Medinet Habu.
(Taylor 2015)

Fig. 6-4.
Ramesses III offers a bouquet and lotus flowers to Min *k3-mwt.f*
Medinet Habu. (Taylor 2015)
Fig. 6-5.
Examples of the two smaller types of bouquet: a hand-held bouquet and a larger one on the offering table on top of a lettuce.
TT C4.
(Adapted from Manniche 1988a: pl. 32 no. 53)

Fig. 6-6.
The gesture with which a medium-sized bouquet was presented. Another hand-held bouquet is depicted on the left, held by a female.
TT C4.
(Adapted from Manniche 1988a: pl. 27)
Fig. 6-7.
Small bouquet on top of the offering table; short, columnar bouquet lying or standing on the floor
Book of the Dead of Ani, sheet 37, spell 185.
BM EA 10470, 37
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6-5-4 Ointments and unguents

Unguents were oil or fat based preparations scented with resins to form a semi-solid perfume, the scent of which lasted a long time. These were applied to the skin or to the surface of a statue with a finger dipped in the preparation in a similar way to the application of myrrh described in 6-5-12.

On the Northern Wall of Room XII (the Shrine of Min) in the Temple of Ramesses II at Abydos, the king is holding a pot of ointment in his left hand and is raising the other hand ‘Offering the ointment to his father Min-Ra.’ (el-Noubi 2005: 340). In figure 6-8, the emperor Hadrian is anointing Min.
A special, secret unguent\textsuperscript{46} incorporating gold, silver, lapis lazuli and other precious substances was prepared for anointing the statues of Min and other gods. These substances also formed part of the actual gods and the anointing process transferred their divine nature to the statues, making them divine in their turn. At

\textsuperscript{46} For an English version of this recipe see Manniche (1999: 45).
Edfu, this unguent was prepared only by the purification priest who performed the ritual. The warm unguent was applied to the statue of the deity using a spatula, necessary as one of the ingredients was a black, viscous wood tar (see 5-4-8). The statue was then ready for the Opening of the Mouth ceremony and could then become ‘functional as a divine being’ (Edfou II, 215-215) (Manniche 1999: 45-46).

6-5-5 M3’t

The concepts of truth, order and the harmony and balance of the universe encapsulated in M3’t existed in the Old Kingdom but the concept was not developed and formulated until the discursive literature of the Middle Kingdom (Assmann 2003: 128-129). These principles were personified by the goddess, M3’t, who was depicted seated and wearing an ostrich feather on her head. She was responsible for preventing isft or chaos from taking control of the ordered and balanced universe.

It has been argued that ‘chaos’ might be an incorrect word to use in respect of the Egyptian belief system, which believed that the cosmos originated from a ‘oneness’ that was an ‘undifferentiated unity’. The fear of chaos was not so much a fear of dis-order but a fear of nothingness, obliteration and no regeneration (Assmann 2003: 204-207).

M3’t was a complex, ethical system which linked correct behaviour, obedience, truthfulness and correct dealing with others - a personal responsibility - to maintaining the universal order. Transgression from any of the right ways of M3’t would allow the forces of isft to take over. It was the king’s duty to uphold these ethical concepts and maintain the order of the universe by ruling justly and respecting the gods. In return, his subjects had to obey him because he was the intermediary between the gods and mankind.

The ritual of the presentation of M3’t, which was performed primarily by kings, to the other gods is first attested in the reign of Thutmose III and was a royal prerogative that may have been symbolic of the ruler’s legitimacy. The figure of M3’t was regarded as the food offering for the gods, although this is never stated in texts related to any offering scenes (Teeter 2002: 189-191; Eaton 2013: 47).
‘…that which you eat is Maat, your drink is Maat, your bread is maat, your beer is Maat…’ (Trans. Moret 1902: 142).

Fig. 6-9.  
Ramesses II offers ḫ tw to Min.  
Hypostyle hall, Karnak.  
(Taylor 2015)

In return for his offering, the king receives stability of his rule, justice and truth:

*I ensure for you that the palace remains stable thanks to your perfect conduct and that your majesty is powerful among the living* (Dendara III, 155).
I place Maat in your heart to do well for the gods and goddesses (Edfou IV, 76)

I remove the falsehood in your time, justice triumphs in your space (Edfou IV, 102)

He is the head of the city, the judge and the scribe who does not receive bribes and hates iniquity (Edfou VII, 91)
(Translations Cauville 2012: 198)

6-5-6 Oils

From at least the Fourth Dynasty, seven sacred offering oils are known, many of which have not been identified. The standard order of listing in the Old Kingdom, in order of offering, was as follows:

- $s\text{thb}$
- $hk\text{nw}$
- $\text{sf}t$ an oil extracted from the resin of *Abies cilicica*, a species of fir tree, also called $\varsigma s$ (Manniche 1999: 108).
- $nh\text{nm}$
- $t\text{wb}\text{t}$
- $h^\text{c}t\text{t}\text{t} nt\ t\text{h}\text{nw}$ best Libyan oil
- $h^\text{t}t\text{t} nt\ \varsigma s$ best cedar oil
(Engelbach 1915: 16; van de Walle 1978: 24; Kanawati and Hassan 1996: 47)

As can be seen in figure 6-10, there was no fixed type of vase for any one oil. However, $nh\text{nm}$ was contained in a $h\text{nm}$ vase K for pouring, and $s\text{thb}$ in a tall, open vase as it was probably a solid (Engelbach 1915: 16).
**6-5-7 Tray of offerings**

Over 200 depictions have been recorded in the Graeco-Roman Period alone of the offering of a large tray laden with food of all kinds as a presentation to Min or other gods to ensure the fertility of Egypt and its agriculture (Cauville 2012: 64).

In return, the king receives from Min:

‘I give you everything that the Nile produces, that the land brings forth in its time’ (Edfou IV, 381).

‘I give you Egypt laden with bread, meat and beer; all cities bow under the bounty’ (Dendara II, 169).

‘I give you offerings in endless quantities; I provision your country with food’ (Dendara II, 187).

‘I give you the fields resplendent with their produce, remarkable for the crops that they have produced’ (Dendara IV, 64).

(Translations Cauville 2012: 65)

This tray of offerings of fruits, flowers, bread, vegetables and meats is not to be confused with a tray bearing a decapitated and butchered gazelle which was associated with Sokar.

**6-5-8 Honey**

Honey was used, amongst other things, in the preparation of unguents, perfumes and ointments (see above), in cake and beer making, therapeutically for its antiseptic properties and as a vehicle for other ingredients (Campbell, El Saeed...
and David 2010: 36-37, Table 1). When offered to Min, who was the prime recipient of honey, it emphasised his fertility:

*Offer the jar containing the secret honey that makes the phallus of the bull copulate* (Edfou III, 258) (Trans. Cauville 2012: 110)

This quotation could be taken to mean that honey stimulates an erection or that it creates a desire to copulate, which would make honey an aphrodisiac according to the OED definition in 5-1. It may be understood superficially as describing honey as an aphrodisiac but it could also be interpreted as the life-force which enables physical copulation.

Honey was believed to be the tears of the eye of Re:

*The god Re wept and the secretions of his eye fell on the ground and changed into a bee. When the bee had been created, its activity was exerted on the flowers, so wax and honey were created* (Papyrus Salt 825) (BM EA 10051) (Trans. Cauville 2012: 110)

Honey was initially gathered from wild bee nests in the desert and wild honey was prized: the Nauri Decree made by Seti I describes the creation of teams of honey collectors who travelled as far south as the Nubian deserts (Griffith 1927: 201, pl. XLI). When the change to managing bees occurred is not known, but the earliest record of bee-keeping is found in the Fifth Dynasty solar temple of Niuserre at Abu Gurob (Crane 1980: 109; Crane & Graham 1985: 2-3, fig. 1). Honey production appears to have been a royal prerogative in the Old Kingdom but, after the Old Kingdom, apiculture came under the authority of the temples. It has been calculated that at least 13,000 kilogrammes of honey were presented to temples as offerings or tribute in the (approximately) thirty year reign of Ramses III alone (Grandet 1994; Manzano 2001: 500-501).

Min had been associated with wild bees and honey through his mastery of the desert since the Pre-Dynastic Period, and it has been suggested that the šḥn might have been a wild bee nest or primitive form of hive (Gauthier 1931a: 247, 288; Wilson 1997: 310).
The importance of plants to bees was recognised by the Egyptians and there appears to have been an understanding that bees were important for the harvest (Gauthier 1931a: 247).

‘What grows on the land, the bee uses it to make honey.’
(Trans. Chassinat 1939: 164)

Evidence for the importance of honey to the cult of Min is indicated in the titles of three of the officials of his cult: the smdy priest of a temple knew the ingredients and made up the secret recipes for the special unguents used to anoint the statues of Min (see 6-5-4); the ‘fly priest was essentially a beekeeper and a third rank of priest, known as bity, collected wild honey from the desert (Montet 1950: 18-27). Mention is made several times in an inscription at Wadi Hammamat of a supplier of honey from the desert for Min (Goyon 1957: no. 89).

Texts at Edfu indicate that the offering of honey was for the protection of the king by Isis, the mother of Min and as such was a rite of kingship (Edfou I, 406, 7-16; II, 96, 16-97, 8; Wilson 1997: 310). In return for the offering of honey, Min ensured the continuation of the king’s family and his line through many offspring, victory over his enemies and a guarantee of his legitimacy and kingship:

I give you your phallus, which multiplies your household (Edfou III, 258)

I give you a voice sharp against your enemies (Denderah IX, 260)

I give you the eye of Re united with the eye of Horus; they take their place on your head (Edfou II, 97)

(Translations Cauville 2012: 111)

6-5-9 Myrrh

This is a fragrant, translucent, pale reddish-yellow gum-resin obtained from Commiphora species, most probably C. myrrha (Nees) Engl. The lack of archaeobotanic evidence prevents the exact identification of the plant and the correct name has not yet been established, but it has been suggested that stntjw may be the Egyptian word for myrrh (Wb I, 206-207: i-iii; Lucas 1962: 92-94; Serpico 2000: 442). Myrrh or stntjw may also be a generic term referring to many plants

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(Cauville 2012: 124) and this latter suggestion is supported by the list of resins inscribed at Edfu temple (Edfou II: 205).

The myrrh resin was imported from south-west Arabia and Somalia (Punt) and was one of only two substances that made good incense, the other being frankincense.

The oil prepared from myrrh, known as mdt, was used in scent, incense and as a balm and was prepared in two ways:

- In pharaonic times, mdt was a pure myrrh unguent, pressed from the resin with no added ingredients and was probably a perfume in its own right 1).
- In the Ptolemaic period, mdt became known as bes, which was a composite unguent containing extract of myrrh plus a base oil (Manniche 1999: 81).

It was presented in a pail-shaped vessel offered on the palm of one hand. The little finger of the other hand is sometimes depicted extended ready to smear the myrrh from the pot on to the statue of the deity (Fig. 6-13) (Sauneron 1959b: 29-32; Vassiliki 1989: 111, 123; Manniche 1999: 27-28, Serpico 2000: 438-443).

Myrrh was offered to Min as the Master of foreign lands, procurer of luxury produce and protector of caravans, much the same as for eye-paint (below).

6-5-10 Eye-paint

Eye-paint came in two main colours: green and black. The green was made from malachite, a carbonate of copper found on copper ore deposits in Sinai and the
Eastern desert. This colour was in use from the fourth millennium to the New Kingdom when it was superseded by black eye-paint based on the lead sulphide ore, galena, which was extracted at a number of sites in the Sinai peninsula, between Quseir and the Red Sea and near Aswan, areas where Min was Lord of the Desert (Aston, Harrell and Shaw 2002: 43-44).

Both malachite and galena represented divine fluids, the secretions of the Eye of Horus which made the dark light (Dendara III, 182, 11 (D); V, 79, 3 & 8(1); VI, 143, 14-144, 11; Edfou I, 425, 12; II, 287, 1 (N) III, 144, 5 (P) (L). At the same time, the secretions were also said to come from the Eye of Ra which shone in the sky by day (Dendara VI, 143, 14-144, 11; Edfou V, 191, 15-16 (Q). Green was for the right eye for health and black to ‘soften’ the left eye (El-Kordy 1982: 202).

Green eye-paint was included in funerary equipment either as a raw material or as make-up with a fat base for ease of application. Black paint was part of the essential preparation in the justification and rebirth of the deceased as described in the rubric to spell 125 in the Book of the Dead:

_The correct procedure in this Hall of Justice. One shall utter this spell
pure and clean and clad in white garments and sandals, painted with
black eye-paint…’_ (Trans. Faulkner 1972: 33-34)

Eye paint was a part of the toilet of the gods. In the Ritual of the Royal Ancestors, a priest would recite:

_May they give ointment to your brow and linen to your whole body, and
may they provide for you green eye-paint and black eye-paint…’_

(Trans. Eaton 2013: 47)

Some eye-paint was imported from Naharin on the Euphrates, also known to the Egyptians as Maryannu or Mitanni (Astour 1972: 103), and from Punt. These imports were for use by the elite at court. Otherwise, the paint was used in the daily ritual in the temples as make-up or as an offering to the gods. The offering of eye paint to Min was important in the Thirteenth Dynasty and again in the Graeco-Roman period, both periods when Min was prominent as Lord of the Desert and Protector of miners and travellers. As the god in charge of procuring the minerals, Min was known as
'... the Seeker of the treasure of Punt.' (Edfou II, 85)


It was offered in knotted bags or sachets made from the skin of gazelle (Fig. 12) and, as offerant, the king was known as

‘...the son of the Seeker of the treasure of Punt who crosses the hills.’

(Dendera V, 79) (Trans. Cauville 2012: 126)

Therapeutically malachite and honey based eye-paint or galena were used in treatments for eye conditions, the names of which have not yet been adequately translated:

For an un-deciphered eye condition called *pdst*:


Eye-paint may have been used as a sympathetic remedy but there is some evidence to show that malachite has an anti-bacterial effect (Nunn 1996: 147, 199).

In return for the offering of eye-paint Min gave the king the desert and its valuable produce of gold, building stone, precious minerals and stones and power over his enemies:

*I give you the mountains that spit for you their stones in all glory* (Edfou III, 273)

*I place your resplendent love in the face of the living, so that your enemies are blinded* Edfou III, 144; Dendera IX, 195; Dendera XIV, 133

(Trans. Cauville 2012).
Fig. 6-12.
Offering eye-paint in gazelle-skin bags to Min.
Dendera, chamber D, third register, north corridor.
(Adapted from Dendara XI, pl. 50)

6-5-11 Gold

This and the following section are related. The Egyptian gold mines lay in the Eastern Desert region bordered by a line from Qena-Quseir on the sea coast down to Nubia, an area under the protection and jurisdiction of Min. The Egyptians identified three main regions: the gold of Coptos; the gold of Wawat and the gold of Kush which were exploited in at different times (Ogden 2000: 161-165; Vercoutter 1959: 128-133). A map of the Koptos gold mines, dating to the Twentieth Dynasty, is one of the oldest maps in the world and can be found in the Muzeo Egizio, Turin (Cat. 1879). Alluvial gold was also found in the Eastern Desert (Rickard 1925: 1008).

Gold was divine, symbolic of the sun, and an imperishable metal that was relatively easy to manipulate. It varies in colour from dull yellow to shades of red (see figure 3-18) (Lucas and Harris 1962: 233).
Piles of gold tribute taken from foreign countries were offered to Min as depicted at the Barque Chapel of Hatshepsut, Karnak, scene 366, block 53 (Burgos and Larché 2006: 128).

Gold was offered to Min as Lord of the Eastern Desert and protector of miners and travellers into the Roman era: he is acknowledged in inscriptions in the desert as:

‘*Pan qui marche dans les montagnes*’ (at Bir el-Ain)

*Pan de la bonne route*’ (at many sites)

*Pan donneur d’or*’ (at the Paneion at el-Boueib) (Aufrère 1991: 137)

In the Graeco-Roman Period, Min of Coptos ‘merged’ with Min/Pan of the desert to become known as a ‘*chrysodotes*’, a gold-giving deity (Aufrère 1998: 12).

**6-5-12 Offerings to Min as Lord of the Eastern Desert**

The town of Coptos lies at the Nile end of the Wadi Hammamat, one of the main routes into the mountains of the Eastern Desert and to the Red Sea, and well-placed to take advantage of its location by prospecting and transporting for expeditions. This gave the town a commercial advantage over its neighbour, Thebes and its local god Min, the opportunity to become protector of travellers in the desert. Prospectors were searching not only for gold but for galena, malachite and veins of valuable Bekhen stone which was used for royal monuments (Aufrère 1991: 137).

The Wadi Hammamat area and Bekhen stone are taken as examples of the nature of the area and the offerings made to Min. The rock-stela of ‘Usimare-nakht’ in the Wadi Hammamat from the reign of Ramesses IV, records an expedition to bring back Bekhen stone for the king (Goyon 89; Kitchen 2012:1). The Great Stela of Wadi Hammamt (Couyat-Montet 12) also details in a long inscription, the way in which Ramesses IV gave orders for an expedition to bring back Bekhen stone, the personnel involved and supplies provided. Offerings were made to Min, Horus and Isis, the triad of the Wadi, for success in the mission (Kitchen 2012: 10, 12-15).
Four Middle Kingdom stelae of Mentuhotep IV commemorate an expedition to find a stone for the lid of the king’s sarcophagus. The first of the stelae details how a pregnant gazelle leapt on to a stone which was destined to become the lid and gave birth, whereupon the gazelle was sacrificed to Min for giving the coffin-lid to the king (Lichtheim 1975: 113-115; Gundlach 1980: 90-114; Lloyd 2013: 368-369).

The mountain where the Bekhen stone was extracted was known as ‘the august mountain’, the quarry area was ‘God’s Land’ and the monuments made from the stone were ‘marvels’ (ḥḥt). Rituals were performed for Min by priests included in the expedition, emphasizing the religious significance of the exercise and the sacred spaces involved (Lloyd 2013: 373-377). However, it is argued that the god(s) are sanctioning the actions of the king and legitimizing his secular rule and ownership of the land in a political, not a religious ideology (Gregory 2014: 45-46).

The king was the image of Min and acted symbolically as the prospector with the epithet ‘son of Min’:

‘…the one who searches for his eyes in To-neter, being the [prospector]’

(Edfou V, 192, 2) (Translator Aufrére 1998: 10)

The reference to eyes or eye relates to the loss of the Eye of Horus. The Egyptians believed that the moon caused minerals to grow in the desert at night and the search for them was symbolic of the search for the Eye, which had lunar aspects, and which the gods had filled with the precious minerals. A further lunar connection was the habit of desert travellers of moving by night when it was cooler and for which good moon-light was necessary (Aufrére 1998: 10-14).

The Great Stela of Abydos, 24:5 details what the king did for Min:

‘O MIN,
I have caused you to stand up as a god, (set) high upon your standard.
I (have) wrapped your phallus with sacred raiment.'
I have caused everyone to (go) veiled, when you rejoice in your beautiful feast.’ (Trans. Kitchen 2012: 26)

6-5-13 Lettuce

Although lettuce was frequently depicted as a symbol of regeneration, it was only offered directly to Min. It has been claimed that two lettuces were always offered by the king (Wilson 1997: 147) but it is not clear if this statement only refers to the Ptolemaic period. Two lettuces are offered each time in the six depictions of lettuce being presented to Min at the Ptolemaic temple at Edfu, but other evidence in the iconography clearly shows that elsewhere in earlier periods, only one lettuce might be offered.

In scenes where only one lettuce is offered, the plant is grasped in one hand whilst the other hand performs a protective gesture. This protective gesture is described as the fingers raised, cupped and pointed towards an object held in the other hand as if to protect it. It is a posture also used in the offering of Maat, white bread, ointment, clepsydra, incense and libations (Teeter 1997: 22; Eaton 2013: 149).

In the Twelfth Dynasty Chapel of Senwosret I at Karnak, for example, the king offers one lettuce (Lacau and Chevrier 1956: scene 20, 23). The king may also hold an ankh in the other hand as Hatshepsut is depicted on the south face of the vestibule of the barque sanctuary or Red Chapel at Karnak, row 2: block 295 (Burgos and Larché 2006: fig. 421). At the Persian temple of Hibis, in the third hypostyle hall, second register on the west wall, Darius I offers to Amun-Re a single lettuce held across the palm of his hand whilst the other hand performs the protective gesture described above (Fig. 6-13) (Davies 1938-1953: pl. 7; PM VII: 283, 75-76).
Fig. 6-13.
Darius I offers a single lettuce to Amun-Re.
Hibis temple, Kharga Oasis. (Adapted from Davies 1938-1953: pl. 7)

In scenes where the king is depicted offering two lettuce or two *mnḥpt* to Min, the king is standing and presenting the plants at shoulder height, one grasped in each hand (Fig. 6-14).

Fig. 6-14.
Two prickly lettuce offered to Amun.
Granite Sanctuary (Barque shrine) of Philip Arrhidaeus, Karnak.
(PM II²: 99 (287)
(Taylor 2014)
**Words spoken by the king when offering lettuce to Min**

In A and B below, the lettuce latex is equated with the semen of Min and the shape with his phallus. Min’s ability to fertilise women is acknowledged and the concepts are re-iterated in C-E below.

A ‘Take lettuce, mysterious herb, issued by you; it is seepage from your body, its discharge comes from your flesh, it is the seminal fluid of Your Majesty’ (Dendara IX, 54).

B ‘This beautiful plant is before you, held by Thoth; it is your living phallus, you ejaculate and you allow births. (Edfou IV, 270)’.

C ‘...the impregnating ram, the bull, the master of women, who terrifies them with his phallus, he of the erect member, famous for its benefits. Min implants semen in the woman to bring about an embryo’ (Edfou VII, 116).

D ‘Your semen, it gave birth to a male son’ (Dendara XI, 30).

E ‘You inseminate women, you inseminate females with the water from your bone’s (Edfou IV, 298, 3-4).

In texts B-E, Min is associated with human fertility. The lettuce appears to be offered to promote the production of Min’s semen and to increase his fecundity and not to increase his sexual desires by means of any aphrodisiac substance. According to Gauthier, the purpose of the offering was to make certain that Min would (was able to?) perform the act of procreation (1931a: 166), i.e. that Min could produce sufficient and fertile semen

**From Min to the king**

a) ‘I give you your phallus to impregnate females; the women are rejoicing to see you’ (Dendara XI, 31).

b) ‘I give you your phallus to be united with women; your heart is impatient to copulate’ (Edfou IV, 271).

In each example, the king is, as to be expected, making an offering in the hope of something in return from the god. He offers lettuce in the hope that his personal fertility will be granted to ensure that his line is continued and offers the produce
of the fields as food for the god in the hope of receiving continued fertility and prosperity for the agriculture on which Egypt depended. In return for the offerings, Min gives the king his phallus and the ability to sustain an erection like the god. The king would then be able to successfully propagate his line thus ensuring the continuity of the kingship and Egypt. From the responses by the god in the second list above, it can be inferred that here Min personifies the concept of the fertility and the prosperity of agriculture and the economy of Egypt.

6-5-14 mnḫp plant

Although botanically unidentified, this plant has been associated with copulation (human behaviour) and mating (animal behaviour) (Wb II, 82, 17) or is identified as ‘ein Aphrodisiacum’ (Wb II, 82 (18). It is not mentioned by Gauthier (1931a or b) or Bleeker (1956) and was only offered to Min. The plant is attested in Papyrus Chester Beatty X, recto 1.12 and verso 1.1 plus a further fragment of the same papyrus. The whole papyrus may date to the mid-Nineteenth Dynasty, but none of the headings therein specifically relates to increasing sexual desire as defined in 5-1. Until the discovery of Papyrus Chester Beatty X (BM 10690), the word mnḫp was known only from Graeco-Roman texts, and has been further translated as ‘a specific ḫaphrodisiac’. Much of the text of the Papyrus is missing and reconstructions have been made of parts so this evidence must be treated with caution (Gardiner 1935: 114 n.1).

The spelling of mnḫp, the plant name, differs at various temples as shown in Table 6-1. This variation in the spelling arose from the increase in the number of hieroglyphs in use from approximately 750 signs in earlier temples to over 7000 in the Graeco-Roman temples: the phoneme ‘n’ could be written in almost 80 different hieroglyphs at Esna temple alone (Sauneron 1959a: 51-52).

<table>
<thead>
<tr>
<th>Spelling</th>
<th>Temple</th>
<th>Period</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Hieroglyph" /></td>
<td>Dendera</td>
<td>Ptolemaic</td>
<td>Dendara 9, 54, pl. 829 &amp; 838</td>
</tr>
<tr>
<td><img src="image2" alt="Hieroglyph" /></td>
<td>Edfu</td>
<td>Ptolemaic</td>
<td>Edfu i: iii, 398, pl. 32a</td>
</tr>
<tr>
<td><img src="image3" alt="Hieroglyph" /></td>
<td>Philae</td>
<td>Ptolemaic</td>
<td>Junker/Winter 1965: 952; Junker 1958:132</td>
</tr>
<tr>
<td><img src="image4" alt="Hieroglyph" /></td>
<td>Kalabsha</td>
<td>Ptolemaic</td>
<td>Kalabchah I, 162, pl. 55a</td>
</tr>
</tbody>
</table>

Table 6-1

Examples of the writing of mnḫp at four Ptolemaic temples

262
The word is defined as follows in Wb II: 82 (1971):

![Fig. 6-15. Definition of mnhp, Wb II: 82](image)

Further variants appear in the Graeco-Roman texts, again with closely related connotations (Wilson 1997: 431):

\[
\text{mnhp: the Begetter} \quad \text{variants} \quad \text{mnhp: aphrodisiac of plant origin}
\]

In reverse order, the definition ‘aphrodisiac plant’ is thought to be a metaphor for lettuce (Yoyotte 1962: 140-141) but this is not proven.

‘The Begetter’ refers to the deity Banebdjed, ‘the \( b^c \) Lord of Djedet’ (Fig. 6-3). Banebdjet was one of several ram gods who were revered for their sexual prowess and he was the Lower Egyptian counterpart of Khnum in Upper Egypt. His main cult centre was at Mendes in the sixteenth nome of Lower Egypt, where the Mendesian Triad was formed of Banebdjed, his wife Hatmehit and their son, Harpokrates. \( b^c \) is an onomatopoeic word for ‘ram’ which also sounds like the Egyptian word \( b^c \), meaning ‘soul’ and, because of this duplication of sounds, Banebdjed was seen as the manifestation of a number of other gods, particularly the soul of Osiris and in the Late Period of Re, Shu and Geb (Redford 2010: 35).

![Fig. 6-16. Banebdjed, the ram god of Mendes.](image)

(Adapted from Dümichen 1885: pl. XLIX)
The myth of Seth and Osiris, related in Papyrus Chester Beatty I, describes how the body of Osiris was dismembered and his body parts were scattered throughout Egypt, his phallus and spine eventually becoming relics at Mendes as texts at Dendera demonstrate (Dümichen 1865: pl. LXXXIII; Mariette 1871: pl. 3, number 14; Sauneron 1961: 26; Yoyotte 1962: 139-146; Redford 2010: 131). These body parts were capable of reproduction because the Egyptians believed that sperm was generated in the bones of the vertebral column (Sauneron 1960: 21). The parts were known at Mendes as mnhp a word which, it has been suggested is a homonym for lettuce (�bw) (see above) but which, in the Mendesian context, takes the phallus determinative (Urk. VI: 23, 3; Wb II: 284, 3.4; Vandier 1962: 232, n887; Yoyotte 1962: 141; Koemoth 1994: 39-42). This word has been translated as ‘one that enables procreation’, being a substantive formed from the stem of nhp+ the prefix m, originally meaning ‘jump’, then ‘stick out or protrude’ and finally to mean ‘procreate or father’ (Wb II, 284; Yoyotte 1962: 140-141; Wilson 1997: 431).

A single offering scene on the south wall of the Min chapel at Edfu may shed some light on the problem (Edfou I: iii 398, pl. 32a Titre). The scene depicts mnhp being presented to Min ‘the procreator’ but in this instance, the king offers mnhp in two pots: ḫnk n itf, and receives in return ‘all lands doing obeisance to him’ (Wilson 1997: 431). Although Yoyotte suggests that mnhp is a metaphor for lettuce because the same determinatives are used in both words, either Gardiner signs M1 or M2 (1961: 141 n. 1; LÄ 1, 336-337), the two vessels offered by the king suggest that the lettuce plant is not indicated. The vessels or pots may have contained an extract of lettuce - possibly lettuce oil, seeds or the white latex itself - but Yoyotte does not state what he thought might have been contained in the pots (Yoyotte 1961: 141, n. 1; Wilson 1997: 431).

Texts at Philae describe mnhaps being for ‘…die Gottesglieder …’ (Junker 1958: 227 (7-13), fig. 132) which suggests an ointment or unguent for applying to the statue of Min. This reference to limbs or members was also mentioned by Gauthier in a discussion of snhp ‘… la fonction sexuelle’ (1931a: 166). At Edfu, for example, lettuce was offered so that the ‘…membres du dieu…’ could perform the sexual act and, therefore, the lettuce was ‘…en effet…’ regarded by the
Egyptians as an aphrodisiac (Edfou I, 82; II, 44). Gauthier goes on to re-iterate the tale that Egyptian men still eat lettuce in the hope of fathering many children (Gauthier 1931a: 166) but, as is demonstrated in 5-2, it is the seed-oil that is important whether taken as a supplement or eaten as seeds and not the plant itself that is used today.

At Philae, in the reign of Ptolemy VI Philometor, mnhpis spelt as in the second variant for an aphrodisiac plant in the Wb examples shown above. In the overlapping reign of Ptolemy VIII Euergetes II, in the Mammesi at Philae, the word used is as the first variant in the Wb examples but it is rendered as ‘ein Philtrum’ for the god’s limbs (Junker 1965: 49, a (1)). This can be translated into English as a philtre or love potion that arouses desire (COED 2008: 1077) and is possibly more evidence for mnhpas an aphrodisiac (fig. 6-18). Such a potion could be contained in the jars offered at Edfu (above).

Fig. 6-17.
Ptolemy VI Philometor offers lettuce to his father Min of Abaton. Western door jamb of the Mammesi, Philae. (Adapted from Junker 1958: fig. 898, top)
Fig. 6-18.
Ptolemy VIII Euergetes II offers \textit{mnhp} (the filter) to Min. Mammesi, Philae, bottom row, third from north.
The plants offered in figs. 6-19 and 6-20 are different.
(Adapted from Junker 1965: fig. 952)

As has been shown above, there is some philological evidence to suggest that \textit{mnhp} and \textit{bw} may describe the same plant but, without primary evidence for the plant and a secure translation of the word, this cannot be completely resolved. Nevertheless, a comparison of representations of the plants referred to as \textit{mnhp} and lettuce shows that there is a variation in shape.

In an offering scene on the west side of the large pylon at the Ptolemaic temple of Philae, Ptolemy VI Philometer presents two \textit{mnhp} plants to his father Min. The word \textit{‘mnhp} is written in the accompanying text, but allowance must be made for the fact that the hieroglyphs have been partially reconstructed (Junker 1958: I, 227-228, fig. 132; pls. 240 and 952; Martzolff 2011: 110-111). The \textit{mnhp} plants are shorter and broader than the lettuce plants depicted behind Min and they are more curved on the side facing towards the king, whereas the lettuces are of a uniform size, upright and equal sided.
Fig. 6-19.
Ptolemy VI Philometor presents two *mnhp* plants to Min.
West side of large pylon, temple of Philae.
(Adapted from Junker 1958: fig. 132)

A similar representation occurs at Dendera (Fig. 6-20). Here again, the plants held by the king differ in shape from the lettuces behind Min. They are shorter and rounder with a greater curve to the side nearest the king and pointed tops nearer to Min. The markings indicating leaves are the same on both sets of plants.

Fig. 6-20.
The leaves are the same as those on lettuces on the shrine but the shapes differ.
Dendera, chamber D, third register, south wall.
(Adapted from Dendara XI, 50)
A third relief on the western side of the door jambs of the Birth House at Philae depicts Ptolemy VI Philometor offering lettuce to his father Min (PM VI: 223, 159-160; Junker 1958: 147, pl. 898 top) (Fig. 6-17). Here, an element of confusion arises because Junker says that ʿbw in the inscription can also be read mnhp, implying that they are interchangeable but this is not yet proven. The plant depiction is partially destroyed and is reconstructed in Junker’s publication in outline only, but the mnhp shape strongly resembles that on the west side of the large pylon, already referred to above (Fig. 6-18), and is different from the representation of the lettuces behind Min in the same relief.

The same problem arises in an inscription on the eastern exterior wall of the Roman temple at Shanhûr, 20 km north of Luxor on the east bank of the Nile. The king says:

\[
\text{[mn n=]k 'bw r i 'b m d t = k mn\text{h}p r snhp h 'w f=k]}
\[
\text{[Take for] you the lettuce (′bw) in order to unite it with your body (or phallus) and lettuce (mnhp) in order to make procreative your phallus}
\]

(Trans. Minas-Nerpel & De Meyer 2013: 156)

Texts on the south wall of the Crypt of Osiris, built by Ptolemy III Euergetes I and decorated by Augustus, at the Opet Temple\(^\text{47}\) of Ptolemy VII Euergetes II, Karnak describe Augustus offering lettuces and mnhp to Min-Amun-Re (PM II\(^1\): 252, 53-54; de Wit 1958: 258; 1962: 116, pl. 30). These texts are revealing in their content for that which was being offered and what would be granted by Min and it should be noted that it is mnhp that is described in A as the aphrodisiac and not lettuce.

\[A \text{ Formule: Prêts pour toi la laitue qui rend viril ton phallus afin qu'elle affecte la force de tes ennemis; l'aphrodisiaque mnhp fortifie ton phallus et affecte la puissance de tes rebelles; l'abondante végétation abat tes ennemis et fait le carnage parmi tes adversaires.}\]

\[B \text{ Épitâtes de Min: Paroles dites par Min-Amon-Rê, le taureau de sa mère, en son grand lieu, levant le bras, dont on vante la beauté, le taureau copulateur qui est sur les femelles, le générateur au phallus rigide, Khepy qui procréa dans le passé, le beau de visage aux deux hautes plumes.}\]

\(^{47}\) Also referred to as Apet by PM
C Paroles de Min: Je te donne le jardin avec ce qu’il contient, le verger avec ce [qui lui appartient].

D Derrière le roi: J’accepte tes territoires ww, je traverse le jardin, j’apportera laitue pour ton plaisir, je l’élève pour toi, étant donné qu’elle a poussé, afin que ton visage brille en la voyant.


On the interior of the Inner Gateway, north wall, of the Persian temple at Hibis in Kharga Oasis, according to the text in front of the king, Darius is shown offering lettuce to his father, Amun-Re ḫ3-mwt.f (Cruz-Uribe 1988: 59) (Fig. 6-23). The lettuces held by the king are unlike the depictions of lettuce behind Min, being shorter with the leaves indicated and they bear a closer resemblance to the representations of mnhp discussed above.

Fig. 6-21.
Lettuces offered by Darius I at Hibis temple.
The plants are unlike lettuces and resemble those in figures 6-18 and 6-19 which are described as mnhp.
(Taylor 2015)
Three other lettuce offerings depicted at Hibis are shown below (Fig. 6-22) and these do not compare with the mnhp plants illustrated above.

Fig. 6-22.
Lettuce types depicted at Hibis temple, for comparison with mnhp
(Adapted from Davies 1953: pls. 57, 41, 63)

The association of plant and phallic symbol re-inforced the concept of masculine fertility and its link with Min, but the association of lettuce with fertility arose, not from pharmacology, but from an ‘historico-religieux’ aspect, and in this connection Koemoth suggests a theory about the consumption of lettuce offerings (1994: 39-41). The bouquets of lettuce presented to Min (‘nh.w Mnw), some of which appear on the reposoir of Min in processions (Epigraphic Survey 1940: pl. 202), were eaten after the offering ritual in the hope of increasing the fertility of the men who had purchased the bouquets from the temple (Speigelberg: 1926: 7-10). This theory removes the reliance on the theory that lactucarium was the compound responsible for the alleged aphrodisiac effect of lettuce, which has not been proven pharmacologically, (Koemoth 1994: 41) but it should be stressed that it is predicated on the plants in the bouquets being confirmed as lettuces. It is not known whether the king actually consumed any of the lettuce offering after the rituals so that his fertility could be acquired from it by sympathetic magic. It is also unclear exactly how the ordinary people regarded lettuce, apart from as a vegetable.

The rapid growth of the lettuce led to its association with the phallus and spinal cord of Osiris but the mnhp that is the phallus and spinal cord of Osiris appears to be a separate, unique identification specific to Mendes, the sexual prowess and fertility of the ram and Banebdjet (Koemoth 1994: 42).
Referring to Gauthier’s statement that texts at Ptolemaic temples repeatedly say that lettuce was offered to make the god’s members able to procreate (1931a: 166), this may be interpreted as an aphrodisiac but could also mean the lettuce and its latex being offered to ensure fertility and the production of offspring in the spirit of do ut des.

\textit{mnhp} may be a homonym for ‘bwor, alternatively, the words could refer to two unrelated plants; \textit{mnhp} could refer to products such as the seed oil obtained from lettuce or an unknown plant or, in the opinion of the author and referring back to the discussion in 3-6-3, \textit{mnhp} may refer to a different variety of lettuce from \textit{L. sativa}, possibly \textit{L. virosa}. Given that the bulk of evidence for \textit{mnhp} is to be found in the Graeco-Roman period, it is feasible that by this time more than one variety or cultivar of lettuce existed. The evidence identifying \textit{mnhp} with the lettuce plant is inconclusive but strongly suggests a link with a species of lettuce and Min. As with the lettuce plant, and it is easy to say this, until primary evidence for either plant or evidence for lettuce oil or an ointment is discovered and the language is better understood, this problem remains insoluble.

\textbf{6-6 Summary}

Taken overall, these offerings emphasise either severally or alone, the fertility, regenerative and protective aspects of Min. The texts at Edfu and Dendera provide a glimpse of earlier traditions in addition to serving the multi-faceted purposes of kings and the priesthood. Egypt was an agrarian-based culture and, in theory, the king was the ultimate owner of all the land so it is reasonable that a fertility god should be honoured and invoked by the Egyptians. The texts suggest that lettuce was offered as a metaphor for fertility and regeneration, primarily with the hope of at least maintaining and, if possible, increasing Min’s semen production for the benefit of the king and Egypt.

These offerings, indeed as were all offerings, were concerned with regeneration. The lettuce, however, was offered for fertility. It can be inferred that the Egyptians saw infertility in any form of life could not lead to regeneration in the afterlife and this was why Ramose prayed to and petitioned Min for children (see 2-8 and figure 2-22).
The *Contendings of Horus and Seth* myth states that lettuce was eaten by Seth because he preferred it to other plants. This suggests that he would have eaten it even without the semen that Isis spread on it. The lettuce was, therefore, only a vehicle to ensure that he swallowed the semen and, had Seth preferred another plant that, too, would have been consumed equally as well, with semen spread on it. Seth was known to have a voracious sexual appetite, thus the myth could be the foundation of the belief that sexually active beings like to consume lettuce in the hope of emulating his sexual prowess. The problem here is the changing nature of the regard in which Seth was held by the Egyptians toward the end of the New Kingdom: the attitude changed to one of despising and demonising the god and would therefore work against the idea of consuming anything associated with Seth. The passage in the *Contendings of Horus and Seth* appears to relate to exceptional powers of fertility in the conception of a son to the two brothers, aided by the regenerative power of Horus, with whom Min is associated.

The Ptolemaic temple inscriptions provide some of the best textual evidence for the offering of lettuce to Min and it does not say in the *Contendings of Horus and Seth* that Seth ate the plant because it enhanced his sexual powers.

Keimer identified the plant in the ancient Egyptian iconography as a lettuce and, as has been demonstrated, this has been accepted into the literature but there is no primary evidence to support this claim or that the plant depicted is a form of lettuce. Accordingly, research since 1924 has proceeded on the basis that lettuce is the plant depicted and that it is a form of *L. sativa* on the basis that until archaeobotanical evidence is discovered to attest to lettuce plants in ancient Egypt, this is the best that can be done.
CHAPTER 7

RESULTS AND CONCLUSIONS

This thesis had two primary research aims:

- To review the evidence for the lettuce plant in ancient Egypt.
- To re-examine the previously noted association of the god Min with a plant identified as lettuce.

The research was primarily library based. It involved the examination and analysis of textual, iconographic, artistic and archaeological evidence. Interdisciplinary studies were used to investigate the history and the nature of the plant in ancient Egypt. Examples of *L. sativa* were grown for observation and comparison with the iconography. The nature of the “aphrodisiac” was investigated using scientific and anthropological studies. The research results were then applied to a study of Min as a god of fertility. This approach has not previously been used in a single study of Min.

The research identified the impact of pre-mid twentieth century social attitudes which restricted open discussion, display and publication of matters relating to sex. These attitudes have affected the interpretation of the sexual nature of Min, and his relationship with the lettuce. This subject was liberated by the change in attitude after the 1960s in the Western world, but a reticence to discuss matters relating to sex and aphrodisiacs can still be detected.

The research confirmed that Min is frequently associated with a plant identified as lettuce. As the research progressed, it became apparent from the textual and iconographic evidence that two or more species of lettuce existed in ancient Egypt, *L. sativa, L. serriola* and that a third, previously unrecognised species, *L. virosa* might have existed at the same time. The latter is now extinct in Egypt. This observation was supported by the use of *L. virosa* in modern European and Middle Eastern plant-based systems of medicine.

The identification of the lettuce plant as an “aphrodisiac” in early Egyptological writings is based on its association with the ithyphallic fertility god Min, and on the fact that the latex, exuded by the plant, when cut or damaged, resembles milk or semen. Nowhere do the Egyptians state that the lettuce is an aphrodisiac.
The Egyptians depicted lettuce in funerary contexts, where it served as both a food for the deceased and as a symbol of regeneration and re-birth due to its rapid growth habit and its green or bluish colour. However, the lettuce does not appear in contexts where an aphrodisiac might be expected to be seen, such as banqueting scenes, although plants with a known effect on sexual behaviour are shown in such depictions.

It has been demonstrated that, if the Egyptians did indeed perceive the lettuce as an aphrodisiac, they were the only ancient Eastern Mediterranean society to do so. Indeed, other cultures recognised the sedative and diuretic properties of the plant and because of this, regarded it as an aphrodisiac. There is little evidence for the use of the latex of *L. sativa* as a sedative but the latex of *L. virosa* is used for this purpose in modern herbal remedies. The sedative properties of the plant may have had an effect that would facilitate social situations and break down tensions: but this does not make it an aphrodisiac. There is no evidence for the presence of aphrodisiac properties in lettuce. The positive health benefits derived from eating lettuce as a vegetable may enhance sexual health and sexual reactions but it would appear that this is a side effect. The placebo effect – the fact that people will believe what they want to believe – may, however, have led the Egyptians to regard lettuce as an aphrodisiac.

The New Kingdom text known as the *Contendings of Horus and Seth* is a pivotal point in the argument that the Egyptians regarded lettuce as an aphrodisiac. The text states that Seth ate lettuce every day because it was his favourite food: it does not explain why it was his favourite food. The semen of Horus was sprinkled on the lettuce and consumed by Seth i.e. the lettuce was simply a vehicle for transmitting the semen. It was the semen, and not the lettuce latex, that made Seth pregnant.

In the final section of the thesis, textual evidence demonstrates that the lettuce was offered by the king to the god to ensure the fertility and regeneration of agriculture and the fertility and regeneration of the king, which would secure the continuation of his line and of humanity. There is no evidence to suggest that lettuce was offered as an aphrodisiac to increase the sexual desire of the god.
At this distance in time it is impossible to fully comprehend how the Egyptians thought about Min and the relationship with the lettuce plant. They had their own world view and belief system: it may, therefore, be a simple fact that that is what they believed: lettuce was an aphrodisiac.

However, a different interpretation may be constructed when the reason for the representation of Min is considered. The image is the visual manifestation of the concept of fertility i.e. the production of the next and future generations of humans or agricultural produce, animal or vegetable. The lettuce symbolised all that was related to this concept: its rapid growth emulated the process of an erection which the Egyptians knew to be essential for human and animal reproduction; the white latex imitated semen and its sometimes rapid propulsion from the plant replicated ejaculation. The plant produces copious amounts of seed, giving rise to the still popular myth that eating these seeds stimulates the production of many children.

The definition of aphrodisiac has been discussed and, in conjunction with textual evidence for the reasons why lettuce was offered to Min, it was found to be an inaccurate description. The difference between lettuce offered as an aphrodisiac and one offered to maintain fertility is not a subtle one.
## APPENDIX 1

### LETTUCE TYPES DEPICTED IN THE ICONOGRAPHY

<table>
<thead>
<tr>
<th>Number</th>
<th>Example</th>
<th>Description</th>
<th>Period</th>
<th>K. no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td><img src="image1.png" alt="Image" /></td>
<td>Plants growing in gardens</td>
<td>OK-NK</td>
<td></td>
</tr>
<tr>
<td>L2a</td>
<td><img src="image2.png" alt="Image" /></td>
<td>Tall lettuce behind Min, plain leaves</td>
<td>OK-NK</td>
<td>K5, NK</td>
</tr>
<tr>
<td>L2b</td>
<td><img src="image3.png" alt="Image" /></td>
<td>Tall lettuce behind Min, leaves have broad mid-rib.</td>
<td>OK-MK</td>
<td></td>
</tr>
<tr>
<td>L3a</td>
<td><img src="image4.png" alt="Image" /></td>
<td>Same as L1 but not growing in a garden, no mid-rib or spines</td>
<td>OK</td>
<td></td>
</tr>
<tr>
<td>L3b</td>
<td><img src="image5.png" alt="Image" /></td>
<td>Same as L1 but not growing in a garden, prominent mid-rib.</td>
<td>OK</td>
<td></td>
</tr>
<tr>
<td>L4</td>
<td><img src="image6.png" alt="Image" /></td>
<td>No apparent mid-rib or spines, rounder &amp; more compact.</td>
<td>OK, FIP</td>
<td>K2-4</td>
</tr>
<tr>
<td>L5</td>
<td><img src="image7.png" alt="Image" /></td>
<td>Resembles palm leaf</td>
<td>11, 12 Dyn.</td>
<td>K8, 10</td>
</tr>
<tr>
<td>L6</td>
<td><img src="image1.png" alt="Image" /></td>
<td>Long, pointed leaves; one crosses over the others, marks on stem</td>
<td>MK</td>
<td></td>
</tr>
<tr>
<td>L7a</td>
<td><img src="image2.png" alt="Image" /></td>
<td>Raged, rudimentary appearance</td>
<td>12D</td>
<td></td>
</tr>
<tr>
<td>L7b</td>
<td><img src="image3.png" alt="Image" /></td>
<td>Refined L7a; no mid-rib or spines, no stalk</td>
<td>MK</td>
<td></td>
</tr>
<tr>
<td>L8</td>
<td><img src="image4.png" alt="Image" /></td>
<td>Elongated stem, ragged leaves</td>
<td>12D</td>
<td></td>
</tr>
<tr>
<td>L9</td>
<td>No illustration</td>
<td>Resemble sceptres?</td>
<td>MK</td>
<td></td>
</tr>
<tr>
<td>L10a</td>
<td><img src="image5.png" alt="Image" /></td>
<td>Club-shaped, plain (after Vassilika 1989: 385)</td>
<td>18D onward</td>
<td></td>
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<tr>
<td>L10b</td>
<td><img src="image6.png" alt="Image" /></td>
<td>Club-shaped, prickly</td>
<td>18D onward</td>
<td></td>
</tr>
<tr>
<td>L11</td>
<td><img src="image7.png" alt="Image" /></td>
<td>Tip bent over</td>
<td>19D</td>
<td></td>
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<tr>
<td>L12</td>
<td>Lettuce or sceptre?</td>
<td>18-19D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>---------------------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L13</td>
<td>Crude images possibly of prickly lettuce</td>
<td>20-22D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L14</td>
<td>Example of block statue lettuce</td>
<td>MK-Ptolem-aic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L15</td>
<td>Angular lettuce; more probably bread in a pot offering</td>
<td>26D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L16</td>
<td>Resembles mnhp plant</td>
<td>Ist. Persian Period</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L17</td>
<td>Club-shaped with cross-hatching in various patterns</td>
<td>Ist. Persian Period</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 2
NAMES AND EPITHETS
OF MIN

*inn-rc*
*imy pr.f*
*ţb.tw m nfrw.f*
*ţbţm [ ]*
*wtt*
*(n) pt.n.f bbn*
*ptšt ţmn ŵnty ɾśy*
*Mnw-ţrw-nḥt*
*m ţśt wṛt*
*m ṣwty wṛ(ty)*
*mĎ țy [---]*
*nfr īhr nḥt*
*mĎ nswt*
*nţrw nb*
*ţpwr*
*nb pwnt*
*nb īnc-ţnh*
*nb swnt*
*hr*
*hr jîc*
*hrĮ nfrw*
*hrĮ nţrw*
*ţkĎ nfr n ṣswt rsywt*
*hpry*
*ţy m ṣwty*
*ţk jî*
*ţk mw.t-f = Kamephis or Kaemphis in Greek Hermetic texts*
*ţk nk*
*gbtyw, gbtywy*
*fţ nţrw*
*ţm pt m ṣwty.f*
### APPENDIX 3

**DEPICTIONS OF $\textit{s\textasciitilde h\textasciitilde k\textasciitilde s\textasciitilde n\textasciitilde t}$**

(Adapted from Minas-Nerpel & De Meyer: 2013)

<table>
<thead>
<tr>
<th>Location</th>
<th>Dynasty</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortuary temple, Pepi II, South Saqqara</td>
<td>6</td>
<td>PM III:II, 427 (18), 4 Jéquier 1938: pl. 12-15</td>
</tr>
<tr>
<td>Mortuary temple, Mentuhotep <em>Nebhepetre</em></td>
<td>11</td>
<td>Decker &amp; Herb 1994: pl. 54 (B2)</td>
</tr>
<tr>
<td>White Chapel, Senusret I, Karnak</td>
<td>12</td>
<td>PM II, 62; Lacau &amp; Chevrier 1956, scene 8, fig. 31, 112-118</td>
</tr>
<tr>
<td>White Chapel, Senusret I, Karnak</td>
<td>12</td>
<td>PM II, 62; Lacau &amp; Chevrier 1956, scene 10, fig. 31, 112-118</td>
</tr>
<tr>
<td>Bark shrine, Amenhotep I-Thutmose I, Karnak</td>
<td>18</td>
<td>Decker &amp; Herb 1994: pl. 55 (B5)</td>
</tr>
<tr>
<td>Amun temple, room XXXIII, Thutmose III, Karnak</td>
<td>18</td>
<td>Decker &amp; Herb 1994: pl. 55 (B7)</td>
</tr>
<tr>
<td>Amun temple, room XLIB, Thutmose III, Karnak</td>
<td>18</td>
<td>PM II, 125 (451) room XLIB</td>
</tr>
<tr>
<td>Amun temple, north court between 6\textsuperscript{th} pylon &amp; festival temples, Thutmose III, Karnak</td>
<td>18</td>
<td>PMII, 92 (206)</td>
</tr>
<tr>
<td>Block from re-used bark station built into Khonsu temple, Amenhotep II, Karnak</td>
<td>18</td>
<td>PMII, 244 (Earlier blocks built in)</td>
</tr>
<tr>
<td>North wall of 12 columned room, Luxor temple, Amenhotep III</td>
<td>18</td>
<td>PM II, 322 (128)</td>
</tr>
<tr>
<td>East wall hypostyle hall, Luxor, Amenhotep III</td>
<td>18</td>
<td>PM II, 318 (102)</td>
</tr>
<tr>
<td>First court, western portico, Temple of Amenhotep III, Soleb</td>
<td>18</td>
<td>PM VII, 170 (7); Schiff Giorgini 2002: 304-305, pl. 122-123 (R 28A, c-d)</td>
</tr>
<tr>
<td>Amun temple, hypostyle hall, north west wall, Karnak, Seti I</td>
<td>19</td>
<td>PM II, 44 (152); Feder 1998: n14 (has pl. 147 of Nelson &amp; Murnane: 1981 wrongly labelled as pl. 14)</td>
</tr>
<tr>
<td>Amun temple, hypostyle hall, south west wall, Karnak, Seti I (re-used by Ramesses II)</td>
<td>19</td>
<td>PM II, 46 (157)</td>
</tr>
<tr>
<td>Location</td>
<td>Page</td>
<td>Reference</td>
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<tr>
<td>-------------------------------------------------------------------------</td>
<td>------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Amun temple, enclosure wall, south side, Karnak, Ramesses II</td>
<td>19</td>
<td>PM II^2, 128 (469)</td>
</tr>
<tr>
<td>Amun temple, enclosure wall, north side, Ramesses II, Karnak</td>
<td>19</td>
<td>PM II^2, 129 (475)</td>
</tr>
<tr>
<td>Luxor temple, court of Ramesses II, western interior wall</td>
<td>19</td>
<td>PM II^2, 308 (28)</td>
</tr>
<tr>
<td>Luxor temple, pylon, east half, south side, Ramesses II</td>
<td>19</td>
<td>PM II^2, 306 (17); Kuentz (1971), pl. XIX</td>
</tr>
<tr>
<td>Temple of Hibis, Kharga Oasis, side room VI off third hypostyle hall, east wall, Darius I</td>
<td>27</td>
<td>PM VII, 285 (102)</td>
</tr>
<tr>
<td>Temple of Hibis, south exterior wall</td>
<td>27</td>
<td>PM VII, 288 (145-146)</td>
</tr>
<tr>
<td>Amun temple, Karnak, Philipp Arrhidaeus sanctuary, south exterior wall (now lost)</td>
<td></td>
<td>PM II^2, 100 (291)</td>
</tr>
<tr>
<td>Temple of Horus, Edfu, inner vestibule, west wall, Ptolemy IV Philopator</td>
<td></td>
<td>Ptolemaic</td>
</tr>
<tr>
<td>Temple of Horus, Edfu, inner hypostyle hall, first column, Ptolemy IV Philopator</td>
<td></td>
<td>Ptolemaic</td>
</tr>
<tr>
<td>Temple of Horus, Edfu, inner hypostyle hall, west wall, Ptolemy IV Philopator</td>
<td></td>
<td>Ptolemaic</td>
</tr>
<tr>
<td>Temple of Horus, Edfu, forecourt, west wall, Ptolemy IX Soter II</td>
<td></td>
<td>Ptolemaic</td>
</tr>
<tr>
<td>Temple of Horus, Edfu, east enclosure wall, Ptolemy X Alexander I</td>
<td></td>
<td>Ptolemaic</td>
</tr>
<tr>
<td>Edfu, Ptolemaic mammisi, south intercolumn wall, Ptolemy IX Soter II</td>
<td></td>
<td>Ptolemaic</td>
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</table>

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<table>
<thead>
<tr>
<th>Location</th>
<th>Period</th>
<th>Reference</th>
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<tbody>
<tr>
<td>Temple of Hathor, Dendera, north wall of inner hypostyle hall, empty cartouches</td>
<td>Late Ptolemaic - Roman</td>
<td>PM VI, 50 (47) second register</td>
</tr>
<tr>
<td>Temple of Hathor, Dendera, east exterior wall, Augustus</td>
<td>Roman</td>
<td>PM VI, 75 (226) top register</td>
</tr>
<tr>
<td>Athribis/Wannina Temple of Repit, east exterior wall, Claudius</td>
<td>Roman</td>
<td>PM V, 136</td>
</tr>
<tr>
<td>Shanhūr, Temple of Isis, west exterior wall, Claudius</td>
<td>Roman</td>
<td>De Meyer &amp; Minas-Nerpel (2012)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Minas-Nerpel &amp; De Meyer (2013)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Minas-Nerpel &amp; De Meyer forth coming</td>
</tr>
</tbody>
</table>
### APPENDIX 4

**DEPICTIONS OF *prt Mnw***

#### Karnak
- **1 Heb-sed chapel Sesostris I**
  - PM II:II, 62-63.
- **2 Great Temple of Amon, hypostyle hall, Seti I**
  - PM II:II, 43 (151)
- **3 Barque temple, Ramesses III**
  - PM II:II, 28-29 (54) (55) (56)
- **4 Temple of Khonsu, forecourt, Herihor**
  - PM II:II, 231 (21)
- **5 Barque shrine of Philip Arrhidaeus**
  - PM II:II, 99-100 (287)

#### Luxor
- **6 Luxor Temple, room VIII, Amenhotep III**
  - PM II:II, 322 (127)
- **7 Luxor Temple, pylon of Ramesses II**
  - PM II:II, 306 (17); Kuenz (1971)

#### Medinet Habu
- **8 Small Temple, Thutmose III**
  - PM II:II, 469 (47)
- **9 Great Temple, second court, Ramesses III**
  - PM II:II, 499-500 (96)-(98)
- **10 Great Temple, room 46, Ramesses III**
  - PM II:II, 515 (177)

#### Ramesseum
- **11 Second court, Ramesses II**
  - PM II:II, 434 (10)

#### Bahria Oasis
- **12 Tomb of Thaty, 26th. Dynasty**
  - PM VII, 304 (11)-(13) (14)-(15)

#### Akhmim
- **13 Rock cut chapel of Min, near Akhmim, Ptolemaic**
  - PM V 18 (12)-(13) (14)-(15)
- **14 Tomb at Akhmim, Roman**
  - von Bissing (1949)
APPENDIX 5

OBSERVATIONS OF MODERN LETTUCE GROWTH

Introduction
There was no possibility of observing wild lettuce in Middle Egypt for the purposes of comparing it with the growth characteristics of modern L. sativa or with depictions in ancient Egyptian art due to the prevailing political situation in the area. Accordingly, L. sativa seeds were grown at the author’s home and the results are recorded here.

It was not possible to obtain seeds of L. virosa for comparison, but growing them may not have been feasible in any case, because the location of the experiment in Mid-Wales lay outside the natural habitat of the plant in the UK.

Aims
The aims were to observe L. sativa at different stages of growth: to note changes in morphology, taste, latex exudation, colour and seed production for comparison with lettuces in the Egyptian iconography and texts.

Methodology
A packet of commercially produced seeds of the modern cultivar L. sativa Lobjoits Green Cos was chosen at random from a selection at an agricultural supplier. On May 10th 2014 approximately 100 seeds were sown in 4 rows in a square plot approximately 40 cms² to replicate an ancient Egyptian garden layout. Due to the elevation of the site at over 244 metres, the prevailing west wind and wet climate, all of which are not conducive to successful lettuce growing outdoors, the seeds were sown in an unheated polytunnel for protection. Watering was performed manually and the bed was regularly weeded. Slug pellets had to be applied to combat a common pest of the area.

Photographs were taken to illustrate stages of development of the plants and regular observations were recorded in the table below in accordance with the stated aims. Additionally, a period of unusually warm weather occurred in July and a note was kept of exceptional temperatures.
## Results

<table>
<thead>
<tr>
<th>Date</th>
<th>Stage</th>
<th>Leaves</th>
<th>Height</th>
<th>Taste</th>
<th>Comment</th>
</tr>
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<tbody>
<tr>
<td>10/5/14</td>
<td>Seed sown</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25/5/14</td>
<td>Germination</td>
<td>2</td>
<td></td>
<td></td>
<td>Later than expected</td>
</tr>
<tr>
<td>4/6/14</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17/6/14</td>
<td></td>
<td>6</td>
<td></td>
<td>Palatable</td>
<td>Bright green, crisp</td>
</tr>
<tr>
<td>24/6/14</td>
<td>Heart developing</td>
<td>7</td>
<td></td>
<td></td>
<td>Growth spurt</td>
</tr>
<tr>
<td>28/6/14</td>
<td>Outer leaves beginning to splay out</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/7/14</td>
<td>Small heart firming</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11/7/14</td>
<td>Leaves loosely packed</td>
<td></td>
<td></td>
<td></td>
<td>Heat wave</td>
</tr>
<tr>
<td>18/7/14</td>
<td></td>
<td></td>
<td></td>
<td>1 plant bolting</td>
<td></td>
</tr>
<tr>
<td>22/7/14</td>
<td></td>
<td></td>
<td></td>
<td>Temp 24</td>
<td></td>
</tr>
<tr>
<td>23-25/7/14</td>
<td></td>
<td></td>
<td></td>
<td>Temp. 26</td>
<td></td>
</tr>
<tr>
<td>26-27/7/14</td>
<td>First plant to bolt now 68 cms</td>
<td></td>
<td></td>
<td>Bitter</td>
<td>Temp. 30 Leaves coarse, blue-grey tinge, majority of plants bolting</td>
</tr>
<tr>
<td>16/8/14</td>
<td>Reproductive stage</td>
<td></td>
<td></td>
<td></td>
<td>Flower buds forming</td>
</tr>
<tr>
<td>24/8/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Flowers opening</td>
</tr>
<tr>
<td>6/9/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 plants supported with stakes due to strong phototropic reaction</td>
</tr>
<tr>
<td>10/9/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Flowers dying back</td>
</tr>
<tr>
<td>30/9/14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Flower heads still retain some colour, desiccating</td>
</tr>
<tr>
<td>14/10/14</td>
<td>Plant height 171 cms max. Av. 151 cms</td>
<td></td>
<td></td>
<td>Bitter &amp;</td>
<td>Seed head brown and dry. Seed dispersed when brushed against or shaken</td>
</tr>
</tbody>
</table>
Slow germination was expected as Cos lettuce is known to take longer than other varieties (RHS 1992: 53). Ten days was stated as the maximum on the packet but the first seedling did not appear until fifteen days. Sixty percent of the seedlings germinated.

The plants rapidly bolted and reverted to the wild type, characterised by a long, wiry stem and small leaves with prickles wide apart. Almost no firm centre formed that was suitable for eating and little close formation of leaves was observed as was to be expected from the illustration on the seed packet (fig. 1). This response was not expected.

![Lettuce Packet](image)

**Fig. 1.**
Packet of lettuce seed used in the experiment.
(Norris 2014)

The growth spurt coincided with an unusual period of high temperature for the area. The mean temperatures of 14.2 °C for June and 16.2 °C for July were both 1°C above the normal average for those months and peaked locally on 26 and 27 July at 30°C. The exceptionally high temperatures, coming at an optimum stage in the plant growth, probably caused the rapid bolting as discussed in 3-6-3 in the text. Bolting may have been a unique occurrence or may have been specific to this variety, but this can only be tested in further work by comparing varieties and growth conditions.

The immature leaves at 12 days following germination were bright green and were edible (see Table 1) but slightly bitter and not pleasing to the palate. At the

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48 Data for Wales obtained from [www.metoffice.gov.uk/climate/uk/summaries/2014/june](http://www.metoffice.gov.uk/climate/uk/summaries/2014/june) and also July.
seven leaf stage a growth spurt occurred, the leaves rapidly became coarse and leathery, some with a blue grey tinge, and a bitter taste developed which increased with age. As the stem elongated the leaves developed prickles and the amount of latex increased. This was assessed visually.

The first plant to bolt did so on 18 July as the temperature increased to 24 °C and by 27 July it measured 68 centimetres. As the stem lengthened, the leaves nearest the growing point were smaller, lanceolate and spaced further apart. Older leaves were coarse and blue-grey colour and by the end of July most plants had bolted. When the stem of bolted plants was broken (fig. 2), latex oozed rather than spurted from the wound. The latex rapidly congealed over the exposed surfaces. The same effects were observed to a lesser extent when leaves were torn or broken off the stem.

It was noticeable that the latex was exuded more forcefully nearer to the flower head than further down the stem, suggesting that pressure was higher nearer the top of the plant.

The reproductive stage began on 16 August when flower buds started to form; these opened on 24 August (fig. 3 and 4).

![Image](image1.jpg)

**Fig. 2.**
Leaves were removed from the left plant and latex can be seen exuding from the wounds, running down the stem and also collecting in the angle where a leaf grew. Prickles are evident on the top leaf on the left stalk. (Norris 2014)
On 6 September, three plants had to be supported with stakes as they were responding positively to phototropism and were in danger of collapsing.
The flowers began to die back on September 10 and by the end of the month the flower heads were desiccated and turning brown. All the unstaked plants still remained upright.

The last observation on October 14 noted that all the seed heads were brown and desiccated. When the stems were broken, sufficient latex to cover the wound was exudated but no latex was produced from the stems in the flower head. Some smaller plants were still green and bearing buds but cold weather prevented them from maturing.

There was no wind in the polytunnel to disperse the seeds. Seeds were dispersed when the plants were brushed against or shaken. The seeds fell almost vertically to the ground and some were collected to examine for oil. The flower heads were shaken and seeds collected in an envelope. The sample was contaminated with detritus and pappus.

The seeds were dry, fewer and smaller than expected when compared to some commercially produced seed of the same cultivar that had been retained from sowing for comparison. The high temperature appeared to have adversely affected seed production or, despite twice daily watering in the hottest period, insufficient water was available to the plants to form large quantities of seed. Insufficient seed was produced to extract any oil by crushing in a pestle and mortar. This cultivar was not bred for oil-production, so the sample may, therefore, be a true representation of the lack of oil in the seeds.

The fact that the experiment coincided with the period of high temperatures was both restrictive and fortuitous: it provided an opportunity to observe plants reverting to a wild type (fig. 5) which were useful for comparison with reported growth habits and lettuce in the ancient Egyptian iconography. On the other hand, a true Cos lettuce was not produced to observe and compare latex production and leaf formation.
Fig. 5
Group of lettuce plants approaching the flowering stage. The leaves are widely spaced and no side shoots were apparent until the flowers formed. (Norris 2014)
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Viagra see Sildenafil

Vienna Code see International Code of Botanical Nomenclature.


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