

The *Nbs* - Tree in Ancient Egypt: Significance and Uses

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Abstract

The *nbs*-tree identified as *Ziziphus Spina Christi* is an evergreen deciduous tree that has fruits resembling wild cherries. The shrub was planted in the Nile valley in ancient Egypt and still grows in Egyptian gardens in Upper Egypt and Nubia today. Nearly all parts of the tree were used in antiquity. The wood of the tree had been used in ancient Egyptian carpentry. Its fruits have been part of the ancient Egyptian diet. Loaves of bread were made of the dried fruit, which are still prepared by Egyptian peasants nowadays. Remains of dried fruits have been found in predynastic tombs and some specimens were even included in the burial equipment of Tutankhamun. The fruit and the bread were attested in funerary texts and numerous offering lists in tombs of the elites. In addition to being a part of the ancient Egyptian diet, *Ziziphus* played a significant role in medicine and the treatment of various diseases.

Through a profound survey of the iconographical, textual, and archaeobotanical sources, this research focuses on the significance of the *nbs* tree and its different uses in ancient Egypt.

Keywords: Trees, Ancient Egyptian Flora, Archaeobotany, Nabq, Siddr, *Ziziphus Spina-Christi*, Christ's Thorn.

1. Introduction

Egypt's natural flora is represented by a wide variety of trees, plants, and herbals, which reveal valuable insights into many aspects of the ancient Egyptian life, society, and culture. (Germer, 2001, 534, 535; Malleon, 2020, 125-126)

The study of the ancient Egyptian flora is based mainly on a variety of different Egyptological sources including scenes in elite tombs, texts, and archaeobotanical remains of plants found in ancient burials and settlements. Egyptian archaeobotany or the study of plant remains in ancient contexts has greatly contributed to our knowledge and understanding of the ancient Egyptian, environment, ecology, daily life activities, diet, economy, trade, as well as religion. (Malleon, 2020, 125-126) These remains further provide important information about the various tree species that were planted in ancient Egypt.

In antiquity, a considerable number of indigenous trees were cultivated along the Nile valley. The *nbs* tree is one of the most important and well-known trees planted in ancient Egypt and is still common today. The shrub was cultivated primarily for its shade and timber in ancient Egypt. (Täckholm, 1956, 344-345; Baum, 1988, 169) The tree is known as *Ziziphus Spina-Christi*, *Jujube* or *Christ's thorn* in English. In fact, the name *Christ's thorn* derives originally from the sharp spines of the leaves of the tree which have been allegedly used to make Jesus's crown of thorns. (Hepper, 1990, 68; Murray, 2000b 627,) In Arabic the tree is identified as سدرة 'Siddr' a term that was cited in the Quran; accordingly, the shrub is greatly respected by Muslims in the Middle East as similarly venerated and treasured by ancient Egyptians. (Al-Khalifa, Al-Arif 1999). The edible fruit of the tree is known in Arabic as 'Nabq' نبق.

All parts of the tree, including its timber, leaves, and fruits have been used in ancient Egypt for a variety of useful purposes and applications in food, carpentry, and medicine. (Dafni et al., 2005, 1-2)

The current research mainly focuses on the significance of the '*nbs*' tree in the religious and funerary context as well as its uses and benefits in the ancient Egyptian diet, industry, and medical treatments. This will be achieved through a profound survey of the available archaeobotanical, textual and iconographical evidence. All the sources follow the historical chronological order; a descriptive and analytical approach is applied throughout the research.

2. Botanical Description of *Nbs* Tree

Ziziphus Spina-Christi (L) Willd or *Christ's thorn* belongs to the buckthorn family (Rhamnaceae) which includes over 100 species of deciduous or evergreen trees widely

cultivated all over the tropical and subtropical parts of the world. It is a densely branched evergreen shrub that strongly resists heat and drought. Yet, it requires high temperatures and good water resources. The tree usually grows from 4 to 20 m tall. Its fairly large agricultural area stretches from northern Iran to east Africa. In Egypt, we meet *Ziziphus Spina-Christi* in the Nile Valley, the Delta, the oases and in the deserts, including those in the mountains of the Red Sea. The intensive use of the tree for centuries has led to its scarcity; it tends to grow in isolation, under the form of shrubs or involved thickets. (Fig. 1) (Germer, 1985, 114; Baum, 1988, 169; Murray, 2000b, 627, 2000b; Saied, 2008, 930; Dhanalekshmi et al., 2022, 43-44)

The leaves 2-4 cm long are ovate to elliptical in shape and have rounded tips. The flowers have a sweet scent and are found in dense clusters in the axils of the leaves. (Fig. 2) The yellow to brown-red stone berries of the shrub called '*Nabq*' resemble small cherries and develop from the yellowish-green flowers. '*Nabq*' fruits ripe during hot and dry weather. The ripe fruit has a single obovate seed and has a sweet, apple-like taste. (Fig. 3) (Murray, 2000b, 627; Saied, 2008, 929-930; Dhanalekshmi et al., 2022, 43-44)

3. Archaeobotanical Remains of *Nbs* Tree

The study of plant remains provides valuable perceptions into ancient environments, food habits, diet variations, agriculture, and ecology. It also offers important information about the ancient Egyptian flora which may not be available in other contexts. (Malleon, 2020, 126) Numerous archaeobotanical remains of the *nbs* tree including its fruits, kernels, seeds, the latter probably from decayed fruits, were discovered during excavations in various sites and cemeteries all over Egypt. (Fig. 4) The fruit remains were

frequently found in pots, bowls, or baskets in both funerary and settlement contexts.

One of the oldest archaeobotanical remains of the *nbs* fruit have been discovered in the Upper Egyptian site of Adaima¹ indicating the existence of the species since the predynastic period and onwards. (Vartavan, 1992, 245) Other predynastic settlements such as Naqada South Town and Hierakonpolis have revealed a variety of plant remains including kernels and carbonized seeds (Fahmy, 1995, 118; Murray, 2000b, 627). These remains were the oldest to be examined from a settlement context and thus offered the earliest insights into the 'everyday' use of the *nbs* fruit in ancient Egypt. In fact, the presence of fruit remains in various settlements suggests that the fruit berries were intentionally gathered and stored for varied uses. It is possible to suggest that some of the fresh fruits were eaten right once, but some of the harvest must have been dried for later use.

Old Kingdom cemeteries have yielded a large number of well-preserved plant remains. Among the oldest are the finds of the 1st Dynasty tomb of Hemaka at Saqqara. Six red vases containing well-preserved Christ's Thorn fruits and bearing the word *nbs* were discovered. (Emery & Saad, 1938, 52; Keimer, 1943, 279-81) About 700 well-preserved Christ's thorn kernels were recovered inside the Pyramid of Djoser at Saqqara. The kernels were yellowish grey in color and vary in size from 3 to 10 mm. (Lauer et al., 1950, 131-132) Also, a number of impressive vases containing dried *nbs* fruit were found in the 6th Dynasty elite tombs of Qubbet El Hawa near Aswan. (Edel, 1971, 24)

¹ The site of Adaima is located on the west bank of the Nile to the south of Esna. The site includes both a predynastic plundered cemetery and a settlement. (Midant-Reynes, 2012, 237)

Further specimens dating to the Old and Middle Kingdoms were found at the royal and private cemeteries at Abusir. A few kernels were discovered amongst the foundation offerings of the 5th Dynasty Pyramid of Sahure and the mortuary temple of Nyuserre and are currently displayed in Berlin Botanical Museum. (Germer, 1988, 40; Vartavan et al., 2010, 256) Fruit remains inside priests' tombs from the latter cemetery have been examined and identified by Schweifurth. (Schweifurth, 1908, 157; Keimer, 1924, 66; Vartavan et al., 2010, 256)

From the 11th Dynasty tomb of Ani at Gebelein well preserved seeds and fruits of Christ's thorn were found inside the burial chamber. The discovery was however dated to the Ptolemaic Period. (Schweifurth, 1885, 260) These remains are currently exhibited in Ägyptisches Museum und Papyrussammlung in Berlin. (Fig. 5)

Likewise, various settlements and burials of the Middle and New Kingdoms have offered well-preserved examples of the fruit remains. In the 12th Dynasty settlements of Hawara and Kahun, Petrie recovered some fruit remnants in a remarkably good state of preservation. (Newberry, 1890, 49-50; Vartavan et al., 2010, 256) Inside the 12th Dynasty tomb of Rahotep at Meir six kernels were found among the plant remains. The kernels are currently preserved in the Egyptian Museum in Cairo. (Kamal, 1914, 87; Germer, 1988, 40; Vartavan et al., 2010, 256) Moreover, the site of Kom Rab'ia at Memphis has revealed well-preserved samples of fruit remains from the Middle and New Kingdoms. (Murray, 1993, 165)


In the 18th Dynasty tomb of Kha at Deir El Madinah, Christ's thorn fruits were preserved in a pottery bowl among other food offerings presented for the deceased in his burial



chamber. (Mattiolo, 1926, 558; Vartavan et al., 2010, 256)











A very good representation of various species of fruits available during the New Kingdom was included in the tomb of Tutankhamun. Christ's thorn fruits were preserved as a part of the royal funerary meal. Inside the annex of his tomb, small red pottery jars containing a large quantity of botanical materials were inscribed in hieratic with the nature of the contents. Numerous stones of the fruits and some entire fruits have been found intact. The latter is naturally shrunken, and the remains of the pulp and the dried skin of the fruit are friable. (Lucas, 1942, 144; Vartavan, 1990, 109) Moreover, the 'Ägyptisches Museum und Papyrussammlung in Berlin' exhibits fruit remains from the New Kingdom tomb D 3X at Deir-el-Madinah. (Fig. 6) (Vartavan et al., 2010, 256)


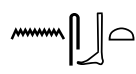
In fact, Christ's thorn plant remnants have been recovered in numerous sites all over Egypt until the Coptic and Islamic eras. The abundance of the archaeobotanical remains throws some light on the agriculture and fruit species that were cultivated and consumed by the ancient Egyptians and indicates the significance of the *nbs* fruit in diet for both the living and the dead throughout the ancient Egyptian history as well as in modern times. (Hepper, 1990, 68)


4. The Ancient Egyptian Name of The Tree

The ancient Egyptian name of Christ's thorn is  *nbs*. (Wb II, 245.10-246.2) (Table 1) The interpretation of the word *nbs* as Christ's thorn was first suggested by Maspero. (Keimer, 1924, 67) This interpretation has been confirmed by the discovery of some pots, containing Christ's thorn fruits. These pots were inscribed with the nature of their content designating *nbs*. The earliest examples of pottery vases inscribed

with their content come from the tomb of Djer at Abydos (Dreyer et al., 2017, 70-71, fig. 71a) and the tomb of Hemeka at Saqqara dating to the 1st Dynasty. (Table 1.1) (Emery & Saad, 1983, 52) In both cases, the term *nbs* was written *bs* with *n* phonogram missing , . However, Keimer identified the content of the vases as *nbs* on basis of parallel discoveries and accordingly confirmed the ancient name. (Keimer, 1924, 67) Additionally, the fruit is mentioned in the Old Kingdom by a quantity of impressive vases from tombs at Qubbet el-Hawa, near Aswan. The content and the inscriptions on the vases were studied and identified as Christ's thorn by Edel. (Edel, 1972) This designation would receive further support from the evidence that the hieroglyphic *nbs* was preserved in the Arabic name 'Nabq', a word that singularly recalls the ancient Egyptian *nbs*. (Loret, 1888, 41) One more reason which leads to the identification of the *nbs* tree as Christ's thorn was the representation of the shrub in the pictorial sources which will be discussed in the following section of the article.

The term *nbs* refers to the tree as well as its fruits. It is accompanied by a wide range of determinatives including the tree ,  the branch , grain signs , various containers that held the fruit as , ,  or  basin with bowls. Otherwise, the tree sign  and the herb sign  were used in late periods. (Table 1)

The loaf of bread sign  which was used on the false door of *Itw* from the Old Kingdom  (Table 1 no. 5) and in a text from

Papyrus Chester Beatty X  (Table 1 no. 26) is noteworthy. It is usually applied to designate loaves of bread, however in this case it might have been mistakenly written by the scribe, or it might refer to the fruit.

The various spellings of the term *nbs* recorded in (Table 1) demonstrate a graphic transposition, particularly in the earliest attestation of the word, where *s* precedes *b*, resulting in the reading *nsb*. This transposition occurred frequently; hence, alternate spellings for the same word are quite common. (Gardiner, 1975, 51)

5. Textual Sources

The term *nbs* has been referred to in a variety of different inscriptions and writings in ancient sources as follows:

5.1 Estates designated as 'Nbs' belonging to High Officials

Old Kingdom private tombs reveal a corpus of scenes depicting processions of female and male figures representing the tomb owner's estates and properties. These parades show women carrying baskets on their heads, containing various agricultural products which provide the deceased with food offerings. Among these processions, some estates were named '*nbs*'. The occurrence of '*nbs*' among the estates of elites indicates the significance of the tree and its fruit in the funerary practice in ancient Egypt.

The earliest example comes from the 5th Dynasty mastaba of *Ny-K3-Nswt* (G 2155) at Giza, where the domain was named '*nbs Snfrw*' Christ's thorn of King Snefru. (Fig. 7) (Junker, 1934, 78; Jacques-Gordon, 1962, 249; Hölzl, 2000, 39-40, 62 (D), 70, 81) Another procession was depicted in the 5th Dynasty tomb of *Ty* at Saqqara with reference to the estate called *Nbs Ty*. (Jacques-Gordon, 1962,

358) Similar processions with *nbs* estates are represented in the 6th Dynasty tombs of *Pth-Htp*, (Hassan, 1975, 51-56, fig. 13; Jacques-Gordon, 1962, 384) and the tomb of *Mhw* at Saqqara, (Jacques-Gordon, 1962, 465; Altenmüller, 1998, 111-132, fig. 7) as well as the tomb of *Hni* at Akhmim. (Kanawati, 1981, 36-38, 46-47, pl. 5, 8b, fig. 1, 25) From the Saite tomb of *Tbi* at Assasif (TT 36) comes an analogous procession with reference to *nbs* fruit. (Kuhlman & Schenkel, 1983, 38)

5.2 Occurrence of 'Nbs' in Funerary Books

The word *nbs* was mentioned in various spells of the Pyramid Texts. It was primarily mentioned in the fruit section for the 'Preparation of the Offering Table'. Utterance 166 (spell 98 c, d) inscribed on the north wall of the sarcophagus chamber in the pyramids of King Wnis and Queen Neith at Saqqara reads: 'Osiris Wnis, take the eye of Horus, that they devoured. Two bowls of Christ's thorn fruit.' The spell may refer to the protection of the eye of Horus with Christ's thorn fruits. (Sethe, 1908; Piankoff, 1968, pl. 67; Allen, 2005, 181) A similar Utterance 181 (spell 104 b) was inscribed also on the north wall of the sarcophagus chamber in the Pyramid of King Pepi I, Queen Neith, and Pepi II at Saqqara. The spell reads: 'Horus gave to you. Two bowls of Christ's thorn fruit'. (Sethe, 1908; Allen, 2005, 247, 256)

The *nbs* tree was one of the few species personified as a tree-goddess who nourished the dead in the afterlife. Utterance 483 (spell 109 a) inscribed on the west wall of the antechamber of the pyramids of Pepi I, Merenre, and Pepi II, reads: 'Offering made by Anubis: May the *Tbm* tree follow you, may the *nbs* (tree) turn its head to you.' (Sethe, 1908; Berger-el Naggar et al. 2001, fig. 16; pl. 7; Allen, 2005, 334, 375, 415).

Coffin Texts provide evidence of *nbs* as well. The deceased desired to be nourished by the Christ's thorn tree in the hereafter according to spell 923. The similarity of this spell with the Utterances of the Pyramid texts 166 and 181 previously mentioned is noteworthy. Furthermore, spell 115 of the Coffin Texts mentions that the *nbs* tree was planted in the necropolis: 'Digging a pond, planting *nbs*-trees, building a [tomb] in the necropolis.' (Faulkner, 1973, 108)

The bread made from the dried *nbs* fruit *t-nbs* was also recorded in the coffin texts as part of the funerary meal. In CT III 88b spell 187 it says: 'For I own the white crown, the shining one of Anubis, whose bread is made from *nbs* fruits, whose beer is white emmer, and what is made of it is of red emmer.' (Helck, 1971, 25)

5.3 Occurrence of 'Nbs' in the Offering Lists

The primary textual sources of *nbs* come from the offering lists. More than 200 attestations of *nbs* and *t-nbs*, the bread made from the dried fruit, appear in the offering lists decorating the mastabas of the dignitaries until the end of the Old Kingdom. (*Wb* II, 245.10-246.2; Hannig, 2006, 618 ff.) Most of the attestations of *nbs* and *t-nbs* in offering lists were inscribed in the offering chapels, often on the false doors of private tombs. However, fewer lists were carved in burial chambers as in the tomb of *Ihy* at Saqqara. (Kanawati, Abder-Raziq, 2003 62-64, pl. 3-4, 28, 72-73)

The earliest example of offering texts including the fruit comes from the tomb of Queen Meresankh III and the tomb of the king's son Khafkhufu at Giza dating to the 4th Dynasty. (Simpson, 1974, 5f., 17f., pl. 10; fig. 9; Simpson, 1978, 15-17; pl. 20-24, fig. 32, 33) A further reference to *nbs* fruit comes from a 4th Dynasty rock inscription at Elephantine. The graffito mentions *nbs* amongst the

offerings presented to the deceased Khufu-Ankh. (Habachi, 1957, 55-71)

Offering lists recorded on offering tables and slab stelae also included evidence of *nbs* fruits and *t-nbs* bread. For instance, the offering tables from the mastaba of the dwarf Seneb, (Fig. 8) that of Ii-mry, (Junker, 1941, 1951, 100-104, fig. 28; 1951, 145-147, fig. 53) and those in mastabas G 2135 and G 4860 at Giza. (Der Manuelian, 2003, 30-31, 108)

Examples of stelae with reference to the fruit include the stela of Satju² (G2352), (Simpson, 1980, 35, pl. 56 a, fig. 47) Qar/Pepi-nfr (CG 1669) (Kanawati, 1986, 60, 62, pl. 13a, fig. 29a) and Meritites³ (Freed, et al., 2003, 73) from the Giza cemetery. The 11th Dynasty stela of Henunu⁴ bears a list of offerings, among which *nbs* was also presented. (Hodjash and Berlev, 1982, 67-73)

Furthermore, the fruit existed among the offerings presented to the deceased on some sarcophagi, such as the sarcophagi of *Idw* II (Junker, 1947, 96-106, fig. 40-46, pl. 28; Kayser, 1978, 36f., fig. 4), Mery-Ib at Giza (Junker, 1947, 148-151, fig. 72, pl. 24b) and that of Ny-Smdt at Saqqara. (Lloyd et al., 1990, 28-31, pl. 18) The necropolis of Akhmim in middle Egypt has yielded a large number of 6th Dynasty sarcophagi bearing *nbs* among their offering products. The sarcophagus of *Min-B3.f* exhibited now in the Ashmolean Museum 1911.477 is one of the examples. (Kanawati, 1989, 58, 59, 61, 62, pl. 9, fig. 30)

Additional evidence of the fruit offering appeared in the Annal inscriptions of King

² The stela is currently displayed in Museum of Fine Arts MFA 13.4341.

³ The stela is exhibited now at the Museum of Fine Arts, Boston, MFA 12.1510.

⁴ The stela is displayed in the Pushkin Museum of Fine Arts 4071 in Moscow. https://pushkinmuseum.art/data/fonds/ancient_east/1_1_a/1_1_a_5603/index.php?lang=en (accessed on 1/4/23)

Amenemhat II from the temple of Ptah at Memphis. *Nbs* was designated as a 'god's offerings' (*hṯp-nṯr*) among the products presented on days 25 and 26 on the 4th month of the flood season during the festival of Sokar, one of the most important events in the ancient Egyptian religious calendar. (Farang, 1980, 75-82, pls. 3-5; Posener, 1982, 7-8)

New Kingdom offering texts provide additional evidence for *nbs* fruit. Papyrus Chester Beatty IX bears witness of *nbs* among the offerings listed during the offering ritual for Amenhotep I. (Tacke, 2013) *Nbs* was also attested among the fruits recorded in the offering list and offering procession of Queen Hatshepsut in her chapel at Deir El-Bahari. (Lubczyńska, 2016, 47, 178)

The fruit occurs also in the formal garden produce offered by servants or gardeners in numerous garden scenes for the banquet and offering tables in the Theban elite tombs during different feasts. In the tomb of Rekhmire (TT 100) at Sheikh Abd El-Qurna fruits were presented to the tomb owner as a part of the formal garden's produce during the celebration of the Beautiful Festival of the Valley. (Virey, 1891, 156; Reichert, 2021, 22) A similar offering was recorded in TT 90 of Nebamun at Sheikh Abd El-Qurna, where the fruits were offered to the deceased amongst the food and produce in a banquet during the Harvest Festival. (Davies, et al., 1923, 31; Reichert, 2021, 51) *Nbs* was also listed among the offerings presented to the god Geb in the tomb of Qenamun (TT 93) at Sheikh Abd El-Qurna. (Davies, et al., 19 46, pl. XLVb; Reichert, 2021, 26)

Moreover, a letter dating to the 19th Dynasty (pBerlin 3043) provides additional reference. *Nbs* fruit was offered among other products as a Nubian tribute. (Ragazzoli, 2012, 237-239)

From the various aforementioned attestations, it has been noticed that the fruit and its bread were frequently presented along with *išd* fruits, *d3b* figs and *wḥ* tigernuts amongst the offerings.⁵ The presence of Christ's thorn fruit in numerous offering lists, and inscriptions related to the formal garden scenes signifies its importance to the deceased as a resource of nourishment in the hereafter.

5.4 Occurrence of *Nbs* in the Geographical Nome Lists

Like many other trees in Egypt, the *nbs* was one of the sacred trees appreciated in antiquity. There are several localities in Upper Egypt bearing the name *hwt-nbs*, 'house of the Christ's thorn' as evidenced in the names referring to Heracleopolis, Hermopolis, and Antaeopolis as *hwt-nbs*. the geographical list of Edfu, the tree was venerated in 16 nomes; only the *šndt* tree surpasses this number; in about 24 of the 42 Egyptian provinces, the tree was assigned a privileged position. (Keimer, 1924, 66-77; Baum, 1988, 173 f.)

5.5 Occurrence of '*Nbs*' in the tomb of Ineni

The fact that the tree was cultivated in gardens in antiquity is proven by its mention in the Theban tomb of Ineni (TT 81). Ineni was a dignitary who oversaw the building activities of King Amenhotep I, Tuthmosis I, and Tuthmosis II. The south wall of the portico is occupied by a garden scene with various types of trees; yet the Christ's thorn tree was not depicted among the trees. To our knowledge, Ineni is the only one who has associated a list of trees with the image of his garden. Twenty names are cited in various quantities, among which were five *nbs* trees. (Fig. 8) (Baum, 1988, 1-3; Dziobek, 1992, 61)

⁵ For more information about tigernuts see: Ezz El-Din, D. M., 'Tiger Nuts: A Revival of an Ancient Egyptian Plant', *JARCE* 57, 2021, 57-73.

6. Iconographical Sources

Scenes adorning the walls of private tombs from the Old Kingdom onwards have provided a rich source of evidence for the study of the flora in ancient Egypt. However, the iconographical sources of the *nbs* tree are limited and rare. The earliest representation exists in the 5th Dynasty mastaba of Neferherentpah at Saqqara. The scene depicts two gardeners harvesting the ripe fruits of the *nbs* tree. (Fig. 9) The accompanying inscriptions read:



Irt n nbs

Harvesting Christ's Thorn (fruit).

(Altenmüller, 1982, 13)

Another scene is depicted in the 5th Dynasty double mastaba of Nebet and Khenut at Saqqara. A fragment from the tomb of Khenut is inscribed as follows: (Munro, 1993, 137-140, pl. 39-42)



Wh3 nbs

Picking Christ's Thorn (fruit)

From the mastaba of *Ni-k3w-Isisi* comes another scene. The north wall of the second hall of the tomb is occupied by five piles of fruits among which one pile is identified as *nbs* fruit. Another inscription reads:



'*h3 t-nbs*', a thousand Christ's thorn fruit cakes. (Fig. 10)

A unique scene comes from the tomb of Rekhmire (TT 100). In this scene neither the tree nor the fruits are represented, instead products of the tree shown. The first two registers on the east wall of the transverse hall depict a procession of men presenting the products of the cities of the south and north of

Thebes to Rekhmire. The inscriptions accompanying the two upper registers mention among the products being presented: Ten peculiar pieces of wood, products of the *nbs* tree; ten bows made of its wood, three skins filled with a fruit paste, and two baskets containing cakes made with those same fruits. (Fig. 11) (Davies, 1944, 33, pl. 29; Germer, 1985, 115) The various products of the tree represented in this scene indicate the use of the different parts of the tree not only in diet but also in carpentry.

Two more examples of the *nbs* tree representations date to later Periods. The first of which dates to the 30th Dynasty. The tree was depicted four times on the large naos of Nectanebo I discovered at Saft El Hennah and is currently displayed in the Egyptian Museum in Cairo CG 70021. In each of the four scenes, the tree is linked to one of the deities of Saft el-Hennah: Osiris, Hathor, Shou-Tefnut, and Soped. The text accompanying the scene states that the tree was cultivated in Saft el-Hennah and gave its name *hwt-nbs* to the sacred domain of the 20th Lower Egyptian province. In the first register, the statue of Hathor is portrayed standing on a pedestal in an open naos; she is represented in the guise of a woman, standing in the tree. The text above the goddess reads: 'statue of Hathor who presides over the *nbs* tree.' The presence of the tree in the scenes of this naos shows the religious significance of the shrub and the importance of its timber in making wooden statues of the gods. (Fig. 12) (Baum, 1998, 175-176; El-Sayed, 2008, 232, 233)

The second representation dating to the Roman Period comes from the temple of Dakka in Nubia and is the most realistic representation of the tree. It depicts a large Christ's thorn tree with large trunks. Under the tree is a calf and a seated figure of the God Thot depicted as a baboon. Here, the tree might be a symbol of


Thot of *P-nbs*, a locality in Nubia. The representation reveals the function of the god and reflects the close relation of the animal with the tree. (Fig. 13) (Keimer, 1924, 66; Baum, 1988, 175) In the two previous representations, the tree symbolizes a locality where it was considered a sacred tree.

7. Uses and Benefits of *Nbs* Tree

The Christ’s Thorn shrub is a multipurpose tree; all its parts had been in use in ancient Egyptian diet, industry (carpentry), and medicine. (De Vartavan et al. 2010)

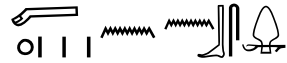

7.1 Nutritional Advantages

Aside from being part of the funeral meal of the deceased, the edible fruit was consumed in different ways and had been part of the ancient Egyptian food. Fruits were eaten either fresh or dried or even fermented with wine. (Keimer, 1924, 66-67; Baum, 1998, 169; Dafni et al., 2005, 1; McGovern et al., 2009, 5) They contain protein, carbohydrates, vitamin C, calcium, and iron. Pliny noted that the seeds and the fruit were both consumed by the ancient Egyptians (Rackham, 1968, NH 13, 33). The seeds are likely to be rich in protein and fat. (Darby et al. 1977, 703; Murray, 2000b, 627). The leaves and fruits were highly valued by domestic and wild animals. Some scenes show monkeys feeding on the harvest of the trees. (Baum, 1988, 170) Wine can also be brewed from *nbs* fruits as still done in Egyptian desert monasteries this century. (Strouhal, 1992, 129; Murray, 2000b, 627)

The fruits were not only eaten raw; loaves of bread *t- nbs*  or cakes were prepared from the fruit as well. The sweet pulp of the fruit was sundried to

⁶<https://thesaurus-linguae-aegyptiae.de/sentence/IBYDVEtRQxiPtKjMl8O6NZfiza4>, in: Thesaurus Linguae Aegyptiae (accessed: 2/18/2023)

produce fine Christ’s thorn flour: *k3w n nbs*

 or *dkw n nbs*


This type of pastry was widely attested in textual sources, especially in the offering lists, alongside the fruits. Cakes of *nbs* wrapped in animal skins and bread loaves served in a bowl were depicted in the tomb of Rekhmire (TT100) as previously mentioned. (Davies, 1944, 33; Germer, 1985, 115) Some specimens of bread had survived from the New Kingdom. Two *nbs* loaves were brought to the Egyptian Museum in Cairo and published by Ahmed Bey Kamal. In his article he provided details about the preparation of this dried fruit into a bread-like dish according to the recipe of man from Darfur named Mahmud-El-Schafi. First, flesh of the berries was separated from the kernels by crushing the fruits in a wooden mortar. The grounded fruit was shaken on a mat to be cleaned. Afterwards, water was added to create a smooth dough, which was then put into dried gourds. Inside a hole in the ground that was lined with leaves, a fire was set, and gourds were kept warm all night. Baked loaves were eaten either alone or with milk. This type of bread was consumed during this period everywhere in Sudan; and were still prepared by Egyptian peasants as late as the beginning of the 20th century. (Kamal, 1912, 241-242; Manniche, 1989, 158)

A number of bread loaves, among which is a leaf-shaped fragment of bread (EA5360) are currently preserved in the British Museum. These loaves contain whole barley grains as well as the pulp of the *nbs* fruit. (Cartwright and Taylor, 2015, 98, table.1, 103, 105) Moreover, a dozen or more loaves of bread made of cereal flour along with Christ’s thorn

⁷<https://thesaurus-linguae-aegyptiae.de/sentence/IBYDNyfZzxpIjEkJnW1PtIBjf8M-00>, in: Thesaurus Linguae Aegyptiae (accessed: 1/8/2023)

flour were deposited in the tomb of Tutankhamun. (Hepper, 2009, 53)

Nbs loaves of bread were also used to make beer. This is confirmed by spell 1013 of the coffin texts CT VII 229 which reads: 'I eat bread of white emmer and drink beer from Christ's thorn fruits.' (Helck, 1971, 25)

7.2 Carpentry


The Christ's thorn tree has been appreciated for its shade and timber in ancient Egypt. Wood of Christ's thorn could be found either as funerary furniture, sawdust or as charcoal. The hard and durable wood of the tree had been used in ancient Egyptian carpentry since the Old Kingdom. This tree was not large enough to have provided the beams that formed the main parts of royal shrines, however the well-developed trunk of the tree provided sufficiently large pieces of timber used for joinery, small items and for the manufacture of dowels, stools. The timber of the tree might have acted as a substitute for cedar wood since the amount of cedar available might have not been sufficient for all the manufacture of dowels or other wooden products.

The artifacts of the Old and Middle Kingdoms as well as textual evidence from the New Kingdom confirm the use of *nbs* wood in the production of some bows, coffins, chests, and stools. The earliest wooden artifact partly manufactured of Christ's thorn wood is the 3rd Dynasty plywood coffin discovered in the Step pyramid at Saqqara. Moreover, the examination of the assembled parts of Khufu's funerary boat has revealed that the small loose tenons used to join the exterior planks were either made of sycamore or Christ's thorn. (Gale et al., 2000, 367).

One of the timbers used in the construction of Middle Kingdom coffins was the Christ's thorn. Two examples of coffin fragments

discovered at Asyut are currently displayed in the British Museum. The first of which is a strip from the upper-edge of a wooden coffin (EA47596), while the second is the plastered wooden coffin of Mesehti from the 12th Dynasty (EA46654). Two more wooden artifacts made of Christ's thorn are currently exhibited the Metropolitan Museum of Fine Arts; a measuring rod MMA15.3.1128 dating to the Middle Kingdom, and a wooden stool MMA14.10.4. (Fig. 14) The latter was found at the necropolis of El Assasif and dates to the 12th -13th Dynasty. The Middle Kingdom private cemetery of Meir has yielded more remarkable examples of funerary furniture made of Christ's thorn timber. The first of which is the canopic chest of the steward Senbi II, from his tomb B3, (Fig. 15) while the second is the outer coffin of the 'mayor's daughter' Nephtys. The coffin is made of Sycamore wood, Christ's thorn, and gold leaves. (Fig. 16) Both funerary equipment date to the 12th Dynasty and are also displayed in the Metropolitan Museum of Fine Art.

Furthermore, the aforementioned scene from the tomb of Rekhmire depicts bows made of *nbs* wood. The accompanying text mentions

10 bows made of wood  \cap *pdt nbs*. (Keimer, 1924, 163; Germer, 1985, 115)

From the tomb of Tutankhamun numerous throw sticks, rods and bows made of *nbs* wood were discovered. Amongst the royal funerary furniture 177 dowels were examined by Lucas, 70 of which were of made of Christ's thorn. (Hepper 1990, 38, 68)

The fact that Christ's thorn timber was greatly valued in antiquity is also confirmed by the ancient Egyptian texts and literature. A Ramesside ostraca from Deir El-Madineh bears a text which reads: 'I will have a coffin of gold and *nbs*-wood made for you'. The text is part of a fictional story called

'Khonsuemhab and the Ghost' in which a high priest of Amun Re Khonsuemhab offers to prepare a man called Nebusemekh a coffin made of Christ's thorn timber. (*Wb* II, 246.2; Fischer-Elfert, 2005, pp. 92-94) Another text inscribed in the temple of Hibis at Kharga Oasis dating to the 26th Dynasty mentions that the divine words of the God Amun were inscribed on wooden tablets made of Christ's thorn timber. (Keimer, 1924, 163)

Indeed, the use of Christ's thorn timber to manufacture tablets, bows, coffins, and divine statues is not only due to the properties of the wood, but also because the tree was regarded as sacred in the ancient Egyptian beliefs.

7.3 Medicinal Benefits

Christ's thorn was one of the medicinal plants which has been widely used in ancient Egypt for curing several diseases. It has retained its reputation as a remedy in the folklore medicine today. Christ's thorn fruits, leaves, bread, and sawdust occur as an ingredient of about 33 remedies and prescriptions in the ancient medical sources. These include the papyri of Ramasseum V, Ebers, Hearst, Berlin 3038, Edwin Smith, and Brooklyn 47.218.48/85. According to the latter sources, Christ's thorn was prescribed for external use as well as internal applications. (Manniche, 1989, 157; Kadioglu et al., 2016, 294)

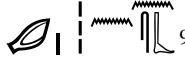
The fruit (Germer, 2002, 83) was known for its anti-inflammatory effects and was hence used as an important component in external remedies against swellings and pain. According to pEbers 582 a remedy consisting of Christ's thorn, sycamore fruits, willow and grounded emmer grains were mixed with gum and water

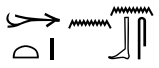

and were applied as a bandage to any swollen member. (Manniche, 1989, 158; Kadioglu et al., 2016, 296, Table 3) Papyrus Hearst 14, describes another remedy of the fruit along with other ingredients to help smooth out a bone fracture. It further states: 'Fingers should be sprinkled with the mixture in honey.' (Germer, 2008, 83; Kadioglu et al., 2016, 296, table 3)

Ebers Papyrus 479 states that the flour of the sundried fruit as well as its paste were added to 8 more components to prepare a drink for treating liver diseases, abdominal pain, and inflammation of mucus membranes. (Manniche, 1989, 158; Germer, 2008, 83; Kadioglu et al., 2016, 296, Table 3)

Apart from being consumed in a daily meal Christ's thorn bread was also used in medicine. From the latter papyrus 480 comes another medical drink. A mixture of *nbs* bread, figs, grapes, and some other ingredients were prescribed for the treatment of liver diseases. A remedy for the so called '3' disease identified as urinary blood fluke also included bread beside 10 more ingredients. The mixture had to be drunk before going to bed as mentioned in pEbers 226, 228. (Bardinet, 1995, 285-287; Westendorf, 1999, 588-592; Germer, 2008, 83) A recipe in pBerlin 3038 (153) consists of grinded bread that was boiled along with fat meat to prepare cakes that were eaten with sweet beer to cure abdominal diseases. Furthermore, bread appeared as an important ingredient in prescriptions used as external bandages. In Hearst Papyrus 134 the heading of the prescription reads 'Driving out illness from all body parts of a man and a woman.' Bread had to be boiled in water and the suffering body part was bandaged with the mixture at warm temperature. (Kadioglu et al., 2016, 296, Table 3)

⁸<https://thesaurus-linguae-aegyptiae.de/sentence/IBcAQEbzMtWFi0jGn1hIDINU MdI>, in: Thesaurus Linguae Aegyptiae (accessed: 2/10/2023)

Leaves *drd n nbs*  were known to have anti-diarrhetic properties. A prescription for treating constipation was prepared from the leaves along with other herbal ingredients as documented in pEbers 210, 216 and pBerlin 3038 (168). Likewise, immature fruits were medicinally useful as a laxative. Ebers Papyrus 188-220 refers to a remedy for the treatment of gastric disorders consisting mainly of figs, leaves of Christ's thorn, leaves of Acacia, and other ingredients added to milk and honey. (Westendorf, 1999, 557-588) From the same papyrus 158 comes another prescription for *wh3* disease (rectum inflammation). In this remedy leaves were mixed with acacia leaves, carob juice and milk and used as anointing agent 'to cool the anus.' (Westendorf, 1999, 564-578) Boiled leaves were applied to various surface wounds. Cooling and refreshing bandages mainly made of *nbs* and acacia leaves were prepared to cool fingers, toes, vessels and to strengthen weakness. The bandages are recommended to be used for four subsequent days as stated in pEbers 616 and pRamesseum V. Snakebites were treated with aches of the tree leaves according to a remedy from pBrooklyn 87a. (Germer, 2008, 83)

Interestingly, in a prescription from pEbers 272 *ht n nbs*  wood and *wst nt nbs*  (Westendorf, 1999, 654-665) sawdust of the tree were blended with a liquid and used as a salve to help regulate the urine. (Manniche, 1989, 157; Kadioglu et al., 2016, 296, Table 3)

⁹<https://thesaurus-linguae-aegyptiae.de/sentence/IBcAU1NfTyWrQkoMIOVWK4dTSZ0>, in: Thesaurus Linguae Aegyptiae (accessed: 5/18/2023)

¹⁰<https://thesaurus-linguae-aegyptiae.de/sentence/IBYBYJssCAk4AUyGhueLzQF2AQ4>

Concluding Remarks

Nbs tree, also known in Arabic as *Siddr* was one of the original constituents of Egypt's wild flora known to the ancient Egyptians since the predynastic period. The shrub is still cultivated widely in Egypt today for its shade and fruits. The current research has unveiled the significance of *nbs* in the ancient Egyptian diet, religion, industry, and medicine.

The presence of *nbs* fruit and *t-nbs* bread in numerous funerary texts and offering lists since the Old Kingdom indicate their importance for the deceased as a source of nourishment in the hereafter. The fruit and the bread were offered amongst the 'God's offerings' in the festival of Sokar. Additionally, it occurs among the formal garden produce offered in New Kingdom tombs of the elites during various feasts such as the festival of the Harvest and the Beautiful Valley.

Archaeobotanical remains discovered in numerous sites in settlement context indicate that the fruit and loaves of bread also played a significant role in the daily life and occur amongst the most consumed meals in ancient Egypt.

As a typical part of the indigenous ancient Egyptian flora, the tree was planted in ancient gardens. This was obviously confirmed by the pictorial attestation of the tree in private tombs since the Old Kingdom. The presence of the tree in Ineni's plant list adds further evidence. The spells of the pyramid texts state that the tree was planted in cemeteries as well.

Nbs was considered a sacred tree in ancient Egypt. It was venerated in many ancient Egyptian localities bearing the name *hwt-nbs* (house of Christ's thorn) as Saft el- Hennah, Heracleopolis and Memphis and was therefore associated with some local divinities as Soped and Hathor. The tree is still respected in some

cultures today and was regarded as holy in Christianity and Judaism. The citation of the *Siddr* tree in the Holy Quran further enforces its sanctity by Muslims in the Middle East.

Nearly all parts of the indigenous tree were used by the ancient Egyptians, and some are still employed today. Fruits were eaten fresh, dried, fermented with wine, or prepared as bread or cakes. Beer was also brewed from the edible fruit. The hard and durable wood of Christ's thorn was used in manufacturing funerary furniture including coffins, throwsticks, bows and stools and divine statues. The use of its wood in the funerary boat of Khufu and the funerary equipment of Tutankhamun further adds to its significance. Ancient Egyptians used the leaves, fruits, bread and even wood and sawdust of the tree in various medicinal prescriptions and remedies.

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Figures



Figure 1: Ziziphus Spina-Christi Tree (*Siddr*).
After: J. Asgarpanah and E. Haghghat, Phytochemistry and pharmacologic properties of Ziziphus spina christi (L.) Willd *African Journal of Pharmacy and Pharmacology* Vol. 6(31), 2012, fig. 1.



Figure 2: Ziziphus Spina-Christi flowers.
After: J. Asgarpanah and E. Haghghat, Phytochemistry and pharmacologic properties of Ziziphus spina christi (L.) Willd *African Journal of Pharmacy and Pharmacology* Vol. 6(31), 2012, fig. 2.



Figure 3: Ziziphus Spina-Christi fresh fruits (*Nabq*)
After: Gh. A. Hegazia, M. I. Diab and R. E. Abo El-Fadl, ‘In vitro propagation of nabq tree (Ziziphus spina-christi (L.) Desf.)’, *Acta Hort.* 1187, fig. 1.



Figure 4: Ziziphus Spina-Christi kernels separated from seeds.
After: Hussein, 2019, fig. 15.1.



Figure 5: Remains of Christ’s thorn fruits from the tomb of Ani at Gebelein exhibited in Staatliches Museum in Berlin. After: <https://id.smb.museum/object/594451/christdornbeeren---zizyphus-spina-christi-l--willd-> (Accessed on 30/3/2021)



Figure 6: Remains of Christ’s thorn fruits from tomb D 3 x at Deir El Madinah currently in Staatliches Museum in Berlin. After: <https://id.smb.museum/object/598532/beeren-des-zizyphus-spina-christi-l--willd--christdorns> (Accessed on 30/3/2021)

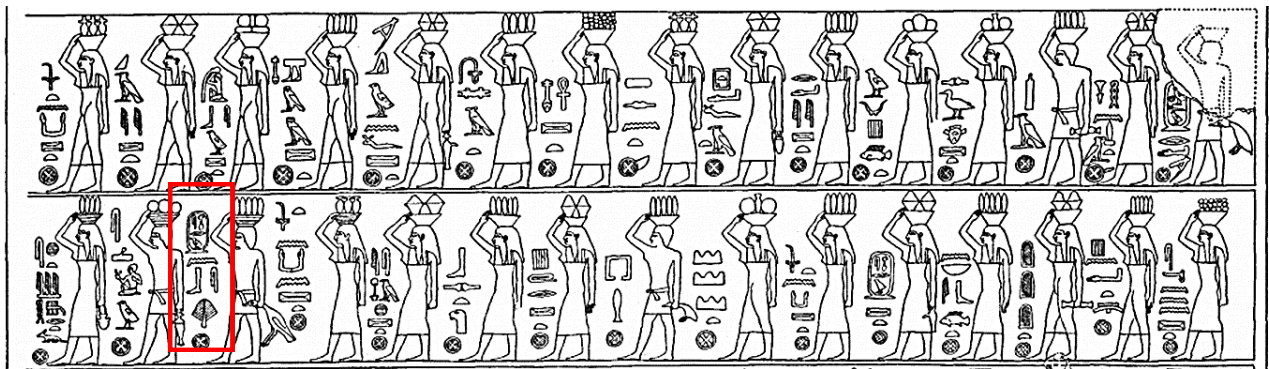


Figure 7: Estates designated as ‘Nbs Snfrw’ from the mastaba of K3-ni-nswt. After: Junker, Giza II, fig. 20.

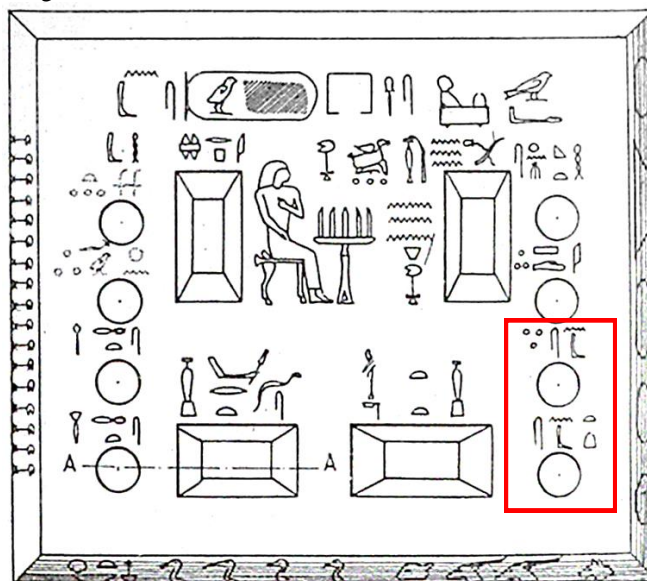


Figure 8: Nbs fruit and bread mentioned on an offering table from the mastaba of the dwarf Seneb at Giza. After: <http://giza.fas.harvard.edu/objects/61419/full/> (accessed on 2/4/2021)



Figure 8: *Nbs* tree listed among the trees planted in the garden of Ineni in his tomb at Sheikh Abd El-Qurna (TT81).
 After: Baum, 1988, p. 1-3.



Figure 9: Two gardeners harvesting *nbs* fruit from the mastaba of Neferherentpah at Saqqara.
 After: https://www.osirisnet.net/mastabas/neferherentpah/e_neferherentpah_03.htm

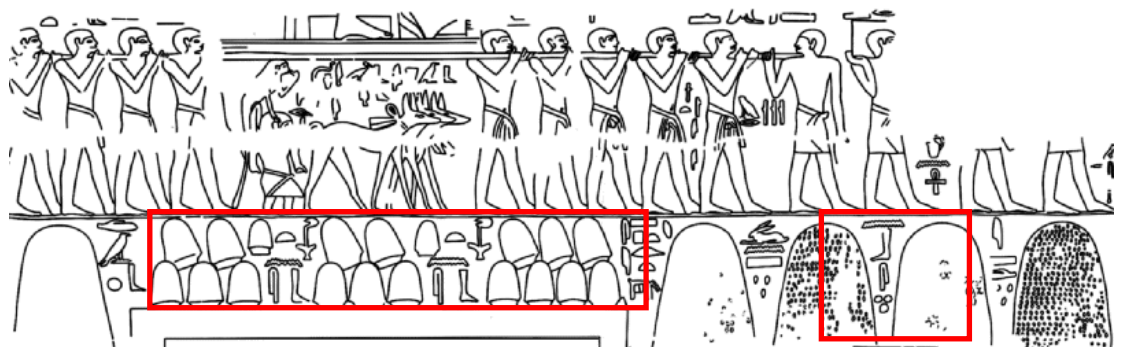


Figure 10: *Nbs* fruit and bread represented in the tomb of Nikauisesi at Saqqara.
 After: Kanawati and Abder-Raziq, 2000, 44, pl. 24-25, 55.

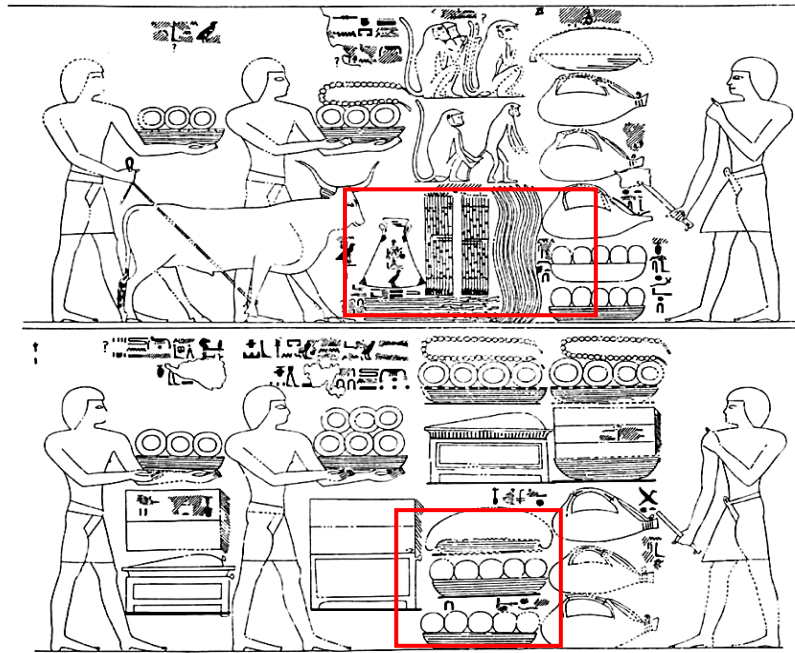


Figure 11: *Nbs* bread and bows made of the Christ's thorn timber represented in the tomb of Rekhmire TT 100 at Sheikh Abd El-Qurna.
After: Davies, 1944, pl. xxix.

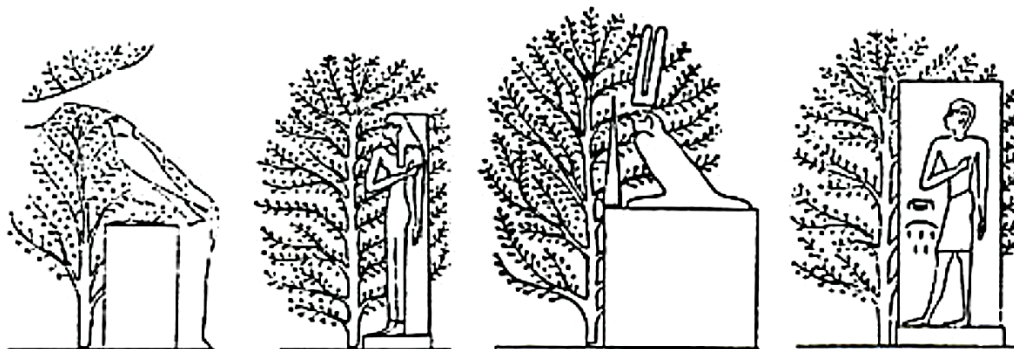


Figure 12: Representation of Christ's thorn tree on the naos of Nectanebo I.
After: Naville, 1887, pl. 5, 2-4



Figure 13: Representation of Christ's thorn tree in the temple of Dakke.
After: Keimer, 1924, 184, fig. 1.



Figure 14: Wooden stool made of Christ's thorn timber, Dynasty 12-13, from a tomb at Assasif, currently in Motrepolitan Museum MMA14.10.4.
After: <https://www.metmuseum.org/art/collection/search/561517>.
(Accessed on 30/8/2022)











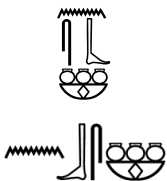


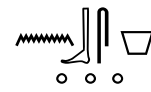


Figure 15: Wooden canopic chest of Senbi II made of Christ's thorn timber, Dynasty 12, From his tomb at Meir, currently in Motrepolitan Museum MMA 11.150.17a1-3.
After: <https://www.metmuseum.org/art/collection/search/546275> (Accessed on 22/3/2023)

















Figure 16: Wooden outer coffin of Nephtys made of Sycamore wood and Christ's thorn timber, Dynasty 12, from her tomb at Meir, currently in Metropolitan Museum of Art MMA 11.150.15a.
After: <https://www.metmuseum.org/art/collection/search/558152>. (Accessed on 21/3/2023)

Table 1: Selected attestations of different writings of the word *nbs*

No.	Spelling	Source	Determinative
1.		Black ink label on vases from the tomb of Hemaka Mastaba S 3035, Dynasty 1. (Emery & Saad, 1983, 52)	Three grains of sand or pellet (Gardiner, N 33)
2.		Label on pottery vase, Tomb of Den, Om El-Qaab, Abydos, Dynasty 1. (Dreyer et al., 2017, 70-71, fig. 71a)	Four grains of sand or pellet (Gardiner, N 32, 33)
3.		Mastaba of Weneschet (G 4840), northern false door, Giza, Dynasty 4. (Der Manuelian, 2003, 30-31, 104-107.) False door in mastaba of Irty, Giza, Dynasty 6. (Junker, 1941, fig. 48)	No determinative
4.		Southern false door in the mastaba of Ka-ni-nswt (G 2155), Giza, Dynasty 4. (Junker, 1934, fig. 18) Label on pottery vessel, Step pyramid of Djoser, Saqqara, Dynasty 3. (https://thesaurus-linguae-aegyptiae.de/text/M6WVVNOSQVG5XCQDRMD6PJNJXI , in: Thesaurus Linguae Aegyptiae (accessed: 4/8/2023) Annal Inscription of Amnemhat II, Temple of Ptah, Memphis, Dynasty 11-17. (Farang, 1980, pls. 3-5)	No Determinative
5.		False door in the mastaba of <i>Itw</i> , Giza, Dynasty 4. (http://giza.fas.harvard.edu/ancientpeople/817/full/)	Loaf of bread (Gardiner, X1)
6.		Mastaba of Meresankh III, (G 7530-7540), Giza, Dynasty 4. (Dunham & Simpson, 1974, fig. 9) Mastaba of Ptah-hotep, Saqqara, Dynasty 5. (Paget and Pirie, 1896, pl. xli). Pyramid Texts, pyramid of Pepi I, spell 486. Dynasty 6. (Allen, 2005, 334) Coffin Texts CT VII 229 spell 1013. Tomb of Inini, TT 100, Sheikh Abd El-Qurna, Dynasty 18. (Baum, 1988, 1-3; Dziobek, 1992, 61)	Tree (Gardiner, M1)
7.		Label on pottery vase, Step pyramid of Djoser, Saqqara, Dynasty 3. (Lauer et al., 1950, 131-132) Mastaba of Ka-ni-nswt (G 2155), Giza, Dynasty 4. (Junker, 1934, fig. 20) Papyrus Ramasseum V, Dynastie 13. (Westendorf, 1999, HdO 1.36)	Tree (Gardiner, M46)
8.		Offering table in mastaba G 2135 (G 4770), Giza, Dynasty 4. (Junker, 1929, fig. 53)	Three grains of sand or pellet (Gardiner, N 33)

No.	Spelling	Source	Determinative
		<p>Stelae from tomb of Nefer (G 1207), Giza, Dynasty 4. (https://portal.hearstmuseum.berkeley.edu/catalog/228b6ea6-e7e0-4db5-81ed-246c53b7dd7a.)</p> <p>Mastaba of Seshemnefer, (G 4940), Giza, Dynasty 5. (Kanawati, 2001, 51-65, pl. 18-24, 38-51)</p> <p>Mastaba of Nikauisisi, Saqqara, Dynasty 6. (Kanawati and Abder-Raziq, 2000, 44, pl. 24-25, 55)</p>	
9.		<p>False door from mastaba (G 4860) Giza, Dynasty 4. Kunsthistorisches Museum, Vienna, Inv. ÄS 8549. (Junker, 1929, 244-246, fig. 59; Der Manuelian, 2003, 30-31, 108)</p> <p>Mastaba of Ka-ni-nswt (G 2155), Giza, Dynasty 5. (Junker, 1934, fig. 15)</p>	Basin with three bowls (Gardiner, W38)
10.		<p>Mastaba of Seshat-hotep (G 5150), Giza, Dynasty 4. (Kanawati, 2002, 23f., pl. 5, 46.)</p> <p>Mastaba of Nswt-nefer (G 4970), Giza, Dynasty 5. (Kanawati, 2002, 39-46, pl. 16, 56.)</p> <p>PT, Pyramid of Unas, spell 166 (line 160), Saqqara, Dynasty 5. (Sethe, I, 1908)</p>	Basket of fruit or grain (Gardiner, M 39)
11.		<p>Mastaba der Wenshet (G 4840), Giza, Dynasty 4. (Junker, 1929, 253, fig. 63)</p> <p>Stelae of Satju (G 2352), MFA 13.4341, Dynasty 6. (Simpson, 1980, fig. 47)</p>	Cup or basket (Gardiner, W 10)
12.		<p>False door in the mastaba of Ka-ni-nswt (G 2155), Giza, Dynasty 5. (Junker, 1934, fig. 12, 18)</p> <p>Mastaba of Senedjemib Inti (G 2370), Giza, Dynasty 5. (Brovarski, 2001, 73, fig. 61.)</p> <p>Mastaba of Ti, Saqqara, Dynasty 6. (https://www.osirisnet.net/mastabas/ty/e_ty_06.htm)</p>	<ul style="list-style-type: none"> - Cup or basket (Gardiner, N 33) - Three grains of sand or pellet (Gardiner W 10)
13.		<p>Sarcophagus of Idu, Giza, Dynasty 6. (Junker, 1947, 96-106, fig. 40-46, pl. XVIII; Kayser, 1978, 36f., fig. 4)</p>	<ul style="list-style-type: none"> - Tree (Gardiner, M1) - Three grains of sand or pellet (Gardiner, N 33)
14.		<p>Tomb of Ibi, Deir ElGhabrawi, Dynasty 6. (https://thesaurus-linguae-aegyptiae.de/search/sentence?tokens[0].lemma.id=82810 in: Thesaurus Linguae Aegyptiae) (accessed: 21/3/2023)</p> <p>Tomb of Padihor, burial chamber, Abusir, Dynasty 25-26. (Coppens, Smoláriková, 2009, fig. 9, pl. 6a)</p>	<ul style="list-style-type: none"> - Tree (Gardiner, M1) - Grain of corns (Gardiner, M 33)

No.	Spelling	Source	Determinative
15.		Sarcophagus of Meri-ib, Giza, Dynasty 6. (Junker 1947, 148-151, Abb. 72, pl. XXIVb)	Four grains of sand or pellet (Gardiner, W 10)
16.		Label on pottery vessel, tomb 88, shaft II, burial chamber, Qubbet El-Hawa, Dynasty 6. (Edel, 1972, pl. 22)	– Tree (Gardiner, M1) – Three strokes (Gardiner, Z2c)
17.		Label on pottery vessel, tomb 89, shaft II, burial Chamber, Qubbet El-Hawa, Dynasty 6. (Edel, 1972, pl. 105)	– One grain of sand or a pellet (Gardiner, N32) – Three strokes (Gardiner Z2c).
18.		Sarcophagus of Amon-m-hat (28091) Egyptian Museum in Cairo. New Kingdom. (Lacau, 1906, 39, 163 (28091) nr.14)	– One grain of sand or a pellet (Gardiner, N32) – Three strokes (Gardiner, Z2).
19.		Tomb of Qenamun TT 93, Sheikh Abd El-Qurna, Dynasty 18. (Reichart, 2021, 25)	– One grain of sand or a pellet (Gardiner, N32)
20.		Tomb of Rekhmire TT 100, Sheikh Abd El-Qurna, Dynasty 18. (Reichart, 2021, 22)	– Basket of fruit or grain (Gardiner, M 39 B)
21.		Ostraca, literary text “story of Khonsuemhab and the Ghost”, Deir El-Madinah, Dynasty 19. (Wb II, 246.2; Fischer-Elfert, 2005, pp. 92-94)	– Tree (Gardiner, M1 A) – Two strokes (Gardiner, Z4)
22.		Papyrus Chester Beatty IX, Dynasty 19. (Tacke, 2013)	– Strokes (Gardiner, Z7) – One grain of sand or a pellet (Gardiner, N32) – Three strokes (Gardiner, Z2).
23.		PBerlin P 3043, letter for a Nubian Tribute, Dynasty 19. (Ragazzoli, 2012, 237-239)	– Two strokes (Gardiner, Z4) – Tree (Gardiner, M1) – Three strokes (Gardiner, Z3).
24.		Tomb of Ibi TT 36, Dynasty 25-26. (https://thesaurus-linguae-aegyptiae.de/sentence/IBUBd3UUnjzPwkIzhaZfEhbDvlk , in: Thesaurus Linguae Aegyptiae) (accessed: 23/3/2023)	– Two cups or baskets (Gardiner, N 33)
25.		Papyrus Ebers 226, Dynasty 17-18, prescription against ʕʕ disease.	– Tree (Gardiner, M1 A)
26.		Papyrus Chester Beatty X, medical prescription, Dynasty 19. (https://thesaurus-linguae-aegyptiae.de/text/M5Z5NWFHHRATLIJKQZ6MQY6GBI , in: Thesaurus Linguae Aegyptiae) (accessed: 28/3/2023)	– Loaf of bread (Gardiner, X1) – Tree (Gardiner, M1) – One grain of sand or a pellet (Gardiner, N32) – Three strokes (Gardiner, Z2).
27.		Papyrus Brooklyn 47.218.48. Dynasty 26. (Meeks, 2006)	– Tree (Gardiner, M1 A) – Three strokes (Gardiner, Z3)
28.		Papyrus Boulaq 3. Roman Period. (Troy, 1993, 55-81)	– Herb (Gardiner, M2) – Three strokes (Gardiner, Z3)