

# The Gardens of the New Kingdom Temples

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## Abstract

Gardens were considered important additions of temples during the New Kingdom. Kings took pride in creating gardens, so Queen Hatshepsut created a garden inside the Deir el-Bahari temple and it was filled with different types of trees. King Amenhotep II established a garden in Karnak, and the texts of Amenhotep III recorded the king's gifts from the gardens of the gods' temples. In a hill for workers, several gardens from the era of Akhenaten were discovered during the excavation process. How much did Ramses II spend on the gardens for his temple in Abydos, and Ramses III created gardens for the Heliopolis Amun Temple. The presence of gardens has spread in the courtyards of temples. The gardens had a role in the religious rituals inside the temples. Where vegetables are grown as offerings, and in the celebrations, the statues of God had to be decorated with flowers from these gardens. These gardens were irrigated with natural irrigation or artificial irrigation

Key words: Gardens, Temples, New Kingdom.

# Introduction

Ancient Egypt's gardens had a significant role in both their environment and religion. Although the gardens cannot be excavated like structures and tombs can, archaeological artifacts still exist that have contributed to our understanding of their design, purpose, and meaning. There are further representations of gardens and flora in paintings and texts, in addition to these excavation reports (fig. 1).<sup>1</sup>

Walls of tombs and temples typically featured these depictions. The gardens must have been extremely amazing if these depictions were based on fact.

Scholars can learn a lot about the purpose of murals since the evidence of gardens on excavation sites frequently matches.<sup>2</sup> Sadly, despite these tools, it is still challenging to fully comprehend the layout and significance of the gardens.

<sup>1</sup> A. Daines, (2008), Egyptian Gardens, Studia Antiqua 6, no. 1 2008.p.15

<sup>2</sup> Lise Manniche(1989), <u>An Ancient Egyptian Herbal</u> (Austin: University of Texas Press/ British Museum Publishings, 1989), 7

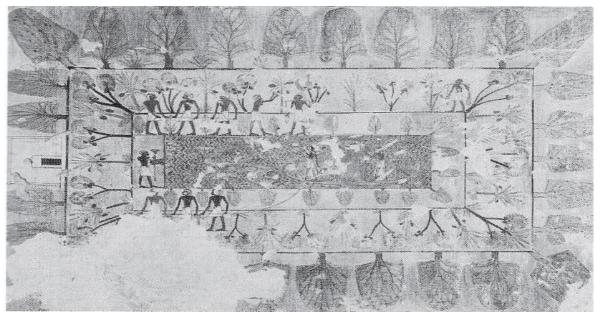


Fig. 1: Tomb of Rekhmire, Valley of the Kings.18<sup>th</sup> Dynasty. After: Daines, Alison. "Egyptian Gardens." Studia Antiqua 6, no. 1 2008.p.15

The temples were equipped with large gardens inside, with large numbers of trees, plants, and ponds for water, it was used in the work of the day service of the temples.<sup>3</sup>

# The garden of El- Deir El- Bahari temple

Perhaps the most famous of these gardens is the garden of the temple of the Deir El- Bahari. In the 9th year of her reign, Queen Hatshepsut stated that she had sent a campaign to Punt land, and that it had returned loaded with various kinds of products from that country, including a group of Sycamore trees<sup>4</sup> that she had erected in her temple for Amun-Ra,<sup>5</sup> and that these trees were still located on the first terrrace of the Temple. wdit mnw nhwt nw tA-nTrt Hr- gswy Hwt-nTr. f m xnt- S.f

"He Planted Sycamore trees of the land of the gods on both sides of his temple of his garden"<sup>6</sup>

The temples owned large areas of agricultural land and gardens, where the temples of Thebes owned about 433 square kilometers of gardens, and the temples of Heliopolis owned about 64 square kilometers, while the temples of Memphis 1 square kilometer of gardens, according to the Harris papyrus.<sup>7</sup>

<sup>&</sup>lt;sup>3</sup> N. Baum, (1988),<u>Arbres et arbustes de l'Egypte ancienne. La liste de la tombe thébaine d'Ineni</u> (n° 81)", *OLA* 31, (1988),Le cabinet de curiosités de Thoutmosis III. Plantes et animaux du «Jardin botanique» de Karnak, *OLA* 36, (1990).

<sup>&</sup>lt;sup>4</sup> Faulkner, R. O(1991)., <u>A Concise Dictionary of Middle Egyptian</u>, Oxford

<sup>1991.</sup> p. 135.

<sup>&</sup>lt;sup>5</sup> Sethe, K.(1961), <u>Urkunden der 18. Dynastie</u>, IV: 352 (11-12). Berlin1961.

<sup>&</sup>lt;sup>6</sup> Sethe,K., <u>Urkunden</u>, IV: 353 (3-4).

<sup>&</sup>lt;sup>7</sup> ارمان. رانكة، مصر والحياة المصرية، ص<sup>7</sup> الرمان. رانكة، مصر والحياة المصرية، ص<sup>7</sup>

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The gardens were an integral part of the temples, the gardens stretched on both sides of the roads within the temple courtyards leading to the entrances to the temple, there was a spacious space within the main corridor containing trees and flowers, and between the buildings were gardens containing fruit groves and various plants, and lotus and papyrus grew around the temple lake.<sup>8</sup>

## Water basins in gardens:

The design of the gardens constantly included water basins, which was symbolic of the primordial waters of creation (fig. 2). Water was the manifestation of the goddess Nun and quite often there was an island located in the center of the body of water to symbolize the initial moments of creation. The body of water followed the east-west orientation of the temple and was rectangular or t-shaped, in the center of the garden.<sup>9</sup>

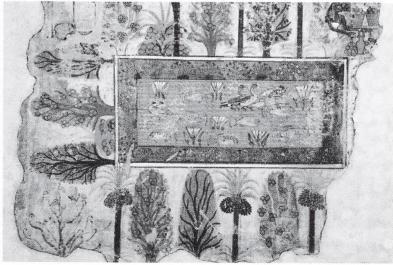


Fig. 2: Tomb of Nebamun, Thebes. 18<sup>th</sup> Dynasty. After: Daines, Alison. "Egyptian Gardens. p.17.

Since the old kingdom, trees have been planted at the entrance to the temple, as evidenced by the temple of the goddess Neith, In Hermopolis inside the first

Courtyard of the temple built by Amenemhat II of the Middle Kingdom, there were three tree pits planted inside the temple courtyard.<sup>10</sup>

The kings were proud to create gardens for the gods, and equip them with trees, plants, and others, like Queen Hatshepsut who erected gardens in her temple.<sup>11</sup> This garden was built by Senenmut, who served as "Garden Superintendent". Along the way during the Hatshepsut era, the sacred ship's shrines and rest stations were surrounded by trees, and the plants of God Amun were growing.<sup>12</sup>

<sup>&</sup>lt;sup>8</sup> ايهاب جميل (2012), <u>النشاط الاقتصادى للمعبد في مصر القديمة خلال الدولة الحديثة</u>، رسالة ماجستير غير منشورة, جامعة بنها,2012, ص 183

<sup>&</sup>lt;sup>9</sup> A.Wilkinson (1994), <u>Symbolism and Design in Ancient Egyptian Gardens</u>, 1994, p. 5.

<sup>&</sup>lt;sup>10</sup> A.Wilkinson (1998), <u>The Garden in Ancient Egypt, London, 1998</u>, pp 121-122.

<sup>&</sup>lt;sup>11</sup>J, Bellinger(2008), <u>Ancient Egyptian Gardens</u>, 2008, p20.

<sup>&</sup>lt;sup>12</sup> A.Wilkinson., <u>the Garden in Ancient Egypt</u>, p 135.

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Thutmose III boasts that he has planted gardens to provide offerings to the gods: "My Majesty has established a garden for him for the first time, planted with all the cheerful trees to serve vegetables to the divine offerings every day".

During the reign of Amenhotep II, as we know from Sennefer Cemetery, he erected a garden in Karnak to offer offerings<sup>13</sup>, and the statue of King Amenhotep II was shaded by fig and sycamore trees.<sup>14</sup>

The Excavations in the garden of the Temple of Amenhotep II in the Deir el Bahariy revealed the remains of roots, leaves, fig trees, sycamores, and other trees, and the pits dug were very deep, confirming that these trees are characterized by their deep and large roots. The texts of Amenhotep III also recorded the king's gifts from the gardens of the temples of the gods in the city of Atrib.<sup>15</sup>

In Tel Al-Amarna, several gardens were discovered during excavations, during Akhenatenera, several rooms were revealed with plants, trees, and a water lake, a water pond, and birds were also discovered in the yards, and many parks and gardens were found.<sup>16</sup>

Ramses II donated gardens to his temple in Abydos<sup>17</sup>, A garden, a vineyard, and trees were also donated to the Temple of Amun at Karnak<sup>18</sup>, The orchard was located within the temple's scope and surrounded by Ammon's gold cabinets, and other lakes were found in Karnak surrounded by gardens for the temple's offerings.

In Memphis, orchards and gardens filled with incense trees coming from the land of God were planted by Ramses II in the Temple of Ptah to please the gods.<sup>19</sup>

In Hermopolis, orchards, and gardens were planted with trees and flowers in the Temple of Amun in the Merenptah era.  $^{20}$ 

Ramses III erected the Amun Temple Gardens, and the road leading to the temple door was decorated with trees and plants.<sup>21</sup> Ramses III's donations to delta temples included gardens, orchards, and farms offering offerings to temples, planting vineyards and lotus flowers.

At the Temple of Amun in Heliopolis, Ramses III erected gardens with trees, grapes, and vegetables, and other temples in the same city set up lakes where lotus, papyrus. The above concerned with the gardens near to the temples or located within the temple, <sup>22</sup> where there was another type of garden far from the temple and was specialized in the production of wine and fruit that was transported long distances in sealed pots and once it reached the temple it was stored inside Its stores. <sup>23</sup>

<sup>&</sup>lt;sup>13</sup> A.Wilkinson., <u>the Garden in Ancient Egypt</u>, p 135.

<sup>&</sup>lt;sup>14</sup> J, Bellinger(2008), <u>Ancient Egyptian Gardens</u>, 2008, p21

<sup>&</sup>lt;sup>15</sup> A.Wilkinson(1998)., the Garden in Ancient Egypt, 1998, p 135.

<sup>&</sup>lt;sup>16</sup> J, Bellinger., Ancient Egyptian Gardens, 2008, p21f

<sup>&</sup>lt;sup>17</sup> J, Breasted (2008), <u>Ancient Records of Egypt, III</u>, 527.

<sup>&</sup>lt;sup>18</sup> A.Wilkinson., <u>the Garden, p 141</u>, fig 75.

<sup>&</sup>lt;sup>19</sup> A.Wilkinson., the Garden in Ancient Egypt, p 143.

<sup>&</sup>lt;sup>20</sup> <u>Ibid</u>, p. 144.

<sup>&</sup>lt;sup>21</sup> A.Wilkinson., <u>Op.cit</u>, p143.

ايهاب جميل(2012), النشاط الاقتصادي للمعبد في مصر القديمة خلال الدولة الحديثة, رسالة ماجستير غير منشورة, جامعة بنها,2012, ص<sup>22</sup> 188

<sup>&</sup>lt;sup>23</sup> B.J.J, Haring, <u>Divine Households</u>, p 376.

The chief of the garden *xnt-S* 

These gardens were attended by high officials such as ministers and city governors because of their importance within the temples. The mayor of Thebes Sin-Nefer during the reign of King Amenhotep II bore the title "Cheif of Amun Gardens".<sup>24</sup> This title has been mentioned more than once in his tomb at Qurna.<sup>25</sup>

imy-r xnt-S n imn

The Cheif of Amun gardens.

Sen-Nefer also mentioned that he oversaw the trees' gardens of The Amun.

 $\square$   $\square$   $\square$   $\square$  Imy-r at nt xt nt imn  $^{26}$ 

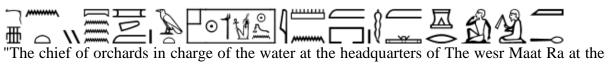
The chief of the trees' gardens of The Amun.

The head of the gardens at the Temple of Amun was occupied by "Enini"<sup>27</sup> during the reign of Thutmose III, and "Epi" during the reign of King Ramses III.<sup>28</sup>

Imy-r xnt-S m Hwt imn The chief of the gardens in Amun temple.

During the reign of King Ramses II, Najm-Ger, the owner of tomb No. 138 in the west of Thebes, served as a garden supervisor in Ramesseum.<sup>29</sup>

Imy-r xnt-S Hry mw m tA Hwt wsr-mAat-ra stp-n-ra m pr imn nDm-gr mAa xrw.<sup>30</sup>



Temple of Amun, Najm-Jar the honest voice".

The manual work inside the gardens rested with the young workers who took the title of kAri the gardener. As part of the investigation into the theft of tombs (p. 10053) in the 20th dynasty, mentioned one of the workers named **iN-wAw** who worked as a gardener in the temple under the supervision of the temple's waqf head. <sup>31</sup>

kAri in wAw n tA Hwt 32

<sup>&</sup>lt;sup>24</sup> E. Newberry(1990), Extracts from my Notebooks (II), in: PSBA 22 (1900), p. 60; Urk. IV: 1426 (1), 1427 (7), 1428 (4), 1431 (15).

<sup>&</sup>lt;sup>25</sup> Urk. IV: 1426- 1431; PM I: 1, pp. 197- 203.

<sup>&</sup>lt;sup>26</sup>Newberry (1990), Extracts from my Notebooks (II)", in: <u>PSBA 22 (1900)</u>, pp. 60- 61; Urk. IV: 1417 (13); PM I: 1, pp. 197-203.

<sup>&</sup>lt;sup>27</sup> Architect of ancient Egypt during the eighteenth dynasty, and was responsible for many architectural projects during the reign of the Pharaohs Amenhotep I, Thotms I, Thotms II, Hatshepsut and Thotms III, and carried many titles, including chief observer of royal silos, chief observer of royal installations and chief worker observer in karnak treasuries. See: PM I:1 159:163; Urk. IV, 62 ff.

<sup>&</sup>lt;sup>28</sup> G. Daressy(1892), Receuil de Cônes Funéraires, paris, 1892, n. 194

<sup>&</sup>lt;sup>29</sup> A. Gardiner and A. E. P. Weigall(1913), <u>Topographical Catalogue of the Private Tombs</u>

Thebes. (London 1913); pp. 28-29; KRI. III, 383 ff; PM I:1,251-252.

<sup>&</sup>lt;sup>30</sup> KRI. III: 383 (12), 384 (1-2), 385 (13-14). 386 (12-13), (15-16), 387(2).

<sup>&</sup>lt;sup>31</sup> T. E. Peet(2005). Great Tomb Robberies II (Oxford 2005), pl. XVII: 3(13).

<sup>&</sup>lt;sup>32</sup> PN I, p. 34(18).

In Waw The gardener of the temple.

## Reasons for the establishment of gardens inside temples:

In ancient Egypt, kings believed that they had been chosen to rule under a divine revelation, and the kings dedicated temples and sacred gardens to play this role, the king considered the gods to be his donors and keepers of life, so providing the temple gardens with plants and trees and taking care of them was necessary.<sup>33</sup>

Since the temples were the headquarters of God and where the daily ritual ceremonies of the God were performed, the gardens played an important role in those rituals, and in the gardens the vegetables offered to the offerings of these rituals were cultivated, where flower bouquets were served as ritual offerings to the gods.

The lettuce plant needed for the offerings of the god Amun was planted in the temple,<sup>34</sup> incense trees were very important for providing resin that was burned during the temple rituals.<sup>35</sup>

The statue of God had to be decorated with wreaths in religious ceremonies and when offering offerings, so the temple garden had an important and key role in meeting the different needs of the temple. <sup>36</sup> In addition to the role of gardens in the rituals and ceremonies of the temple<sup>37</sup>,

They had also played an important role in the breeding of animals and birds needed for offerings. Since the old kingdom, birds have been raised in the orchards and gardens of the temple, such as the Temple of Ni- Wisr- Ra, Amun Temple have also had a poultry barn for the breeding of animals and birds. Breeding has continued in temples during the late Ptolemaic and Roman periods.<sup>38</sup>

The temple gardens had to be more masterful than other gardens, for example, the Garden of God Amun in Karnak contained unique plants imported from Syria and Palestine during the reign of King Thutmose III.<sup>39</sup>

Funeral temples also owned gardens and orchards, but the design of the temple gardens of the gods differed in form from that of funeral temple gardens.<sup>40</sup>

The lake was the central appearance of the temple gardens and was surrounded by trees and flowers, the inner walls of the temples were often decorated with prominent inscriptions of papyrus clusters. The columns in front of the temple represented bouquets installed in the ground. The gardens were part of the symbolism of growth and the annual cycle from the beginning to the end of life, Gods inhabited the gardens, and the sky itself was a garden and its eastern entrance was fraught with green trees.<sup>41</sup>

<sup>.</sup> ايهاب جميل, <u>النشاط الاقتصادى للمعبد.</u> ص 188<sup>31</sup>

<sup>&</sup>lt;sup>34</sup> Wilkinson, A., the Garden, p 123. Lettuce was used in offerings in what is known as b lettuce offerings? This offering is associated with the God of Min, where it appears in the scenes behind the God Min in the form of trees on a base, القرابين والرموز المقدسة المقدمة من الملوك للآلهة في مناظر الدولة الحديثة، دكتوراه، طنطا، دكتوراه، عادل احمد زين العابدين(2001)، القرابين والرموز المقدسة المقدمة من الملوك للآلهة في مناظر الدولة الحديثة، دكتوراه، طنطا، ٢٠٠١405

<sup>&</sup>lt;sup>35</sup> G. Daressy(1892), <u>Receuil de Cônes Funéraires, paris</u>, 1892, n. 194

<sup>&</sup>lt;sup>36</sup> Wilkinson, A., the Garden, p 124.

<sup>&</sup>lt;sup>37</sup> There were plant-specific rooms inside the temples, which were used to preserve plants for use during the celebrations. Weiss, F(1941)., Notes on the Botanical Chamber in the festival temple of Thoutmosis III at Karnak, Journal of the royal horticultural Society <u>66</u>, 1941, pp 51-54.

<sup>&</sup>lt;sup>38</sup> A. Wilkinson., <u>the Garden.</u> p 130.

<sup>189.</sup> جميل, <u>النشاط الاقتصادي للمعبد</u>, ص<sup>39</sup>.

<sup>&</sup>lt;sup>40</sup> G. Renate(2001), <u>Gardens, in Oxford Encyclopedia of Ancient Egypt</u>, vol 2, (e.d Donald Redford, Oxford, 2001), pp 3-5.; L. Manniche(1989)., <u>an ancient Egyptian herbal</u>, <u>Austin</u>, 1989, p. 7.

<sup>&</sup>lt;sup>41</sup> H. Donald(1992)., <u>sustainable agriculture in Ancient Egypt, in agricultural history 66</u>, 1992, pp 14-15; A. Wilkinson., the Garden, p 120.

# The Irrigation of the gardens

There were two types of land irrigation:

<u>The first type</u> was the natural irrigation, which depended mainly on annual flooding, and the annual flood helped to enrich the soil, leading to abundant land production from crops.<sup>42</sup>

<u>The second type</u> is the industrial irrigation of fields, which has been in existence since 3100 B.C., since the early age of the dynasties.<sup>43</sup>

Orchids and gardens were characterized by permanent irrigation and needed a fixed source of irrigation unlike the unseasonal crops that grow in the summer and spread in areas where there is no permanent source of water, manual irrigation was used in the irrigation of vegetable and fruit crops.<sup>44</sup>

As for irrigation tools, shadov, a simple and cheap machine <sup>45</sup> existed since the Middle Kingdom, and was used during the 18th dynasty <sup>46</sup> It is similar to a sakia, a wheel from which water rushes and is operated by animals, but these tools have increased in spread significantly in the Ptolemaic period <sup>47</sup>.

In the irrigation of their nearby lands, the temples appear to have relied on the sacred lake attached to them and located within their surroundings<sup>48</sup>.

## Conclusion

The Egyptian civilization is one of the oldest civilizations that were concerned with gardens. The design of gardens reflected the strength and creativity of engineering in the ancient Egyptian civilization.

Gardens in the ancient Egyptian civilization had other uses such as beautifying Temples and palaces of the pharaohs and residences of the wealthy class of priests and ministers, and it was called the great gardens or botanical gardens.

The gardens in the era of the pharaohs were distinguished by the following:

- Symmetrical geometry is based on straight lines.
- The garden is open, in the middle of it is a rectangular water basin decorated with lotus plants and some fish. It is surrounded from the outside by rows of sycamore and fig trees, followed by tall trees of dom and date palms.
- Regular distribution of statues of gods in the garden.
- Cutting and trimming trees and forming them geometrically as indicated by the inscriptions on the walls of their temples. They also used lily, narcissus, olive grapes, pomegranate, almonds, apricots, and sycamores in the formation of the garden.
- Decorating the interior of the garden with flowers is one of the applications used in the modern era, to which the Pharaohs are credited. They also decorated the pillars of the temples with the shapes of flowers and palm leaves by engraving on them, and painted garden landscapes on the walls and floors of temples and houses.

<sup>&</sup>lt;sup>42</sup> G. Manning(2002)., Irrigation et état en Egypte antique, in <u>AHS</u> 57 (2002), P 614.

<sup>&</sup>lt;sup>43</sup> Butzer, W(1976), <u>Early Hydraulic civilization in Egypt, London</u>, 1976, p 41

<sup>&</sup>lt;sup>44</sup> F. Moens., The procession of the god min to the htjw-garden, in <u>SAK</u> 12, 1985, p. 67, 69, 72.

<sup>&</sup>lt;sup>45</sup> C. Eyer., <u>the water regime</u>, P 64.

مارى أنج & أنى فورجو (2007)، الفرعون وأسرار السلطة، ترجمة فاطمة عبد الله محمود، ٢٠٠٧، ص٢٢٥. 46

<sup>&</sup>lt;sup>47</sup> G. Manning., <u>Irrigation et état en Egypte antique</u>, P 616.

<sup>&</sup>lt;sup>48</sup> C. Eyer., <u>the water regime</u>, P 64.

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Gardens are considered one of the main elements of the annexes of temples during the modern state. We find Queen Hatshepsut who built many wonderful gardens in the temples, as well as Thutmose III, Ramses II, and others.

The water basins which located in the middle of the gardens were one of the main elements in the design of the gardens inside the temples. Today corresponds to the swimming pool that mediates the gardens in the palaces.

The temple gardens, like other institutions, had an administrative structure consisting of a supervisor, subordinates, and workers.

The gardens attached to the temples were of great importance. We find that they had a religious significance, represented in the production of vegetables and fruits that were offered as offerings to the gods, as well as wreaths of flowers that were placed on the statues of the gods in various religious ceremonies. In addition it contributed in feeding the animals of the temples, which are used to make offerings as well.

The temple gardens had to be more masterful than other gardens, for example, the Garden of God Amun in Karnak contained unique plants imported from Syria and Palestine during the reign of King Thutmose III.

The ancient Egyptians relied on two types of irrigation to irrigate gardens:

- The first of them is natural irrigation through floods and rainwater.
- As for the other way, it was the industrial way, in which they used different methods of irrigation, such as the shadoof, which is used to this day.

حدائق معابد الدولة الحديثة

المستخلص

تعتبر الحدائق من الملحقات المهمة للمعابد خلال الدولة الحديثة. افتخر الملوك بإنشاء الحدائق ، فأنشأت الملكة حتشبسوت حديقة داخل معبد الدير البحري وامتلأت بأنواع مختلفة من الأشجار. أنشأ الملك أمنحتب الثاني حديقة في الكرنك ، وسجلت نصوص أمنحتب الثالث هدايا الملك من حدائق معابد الآلهة. في تل العمارنة تم اكتشاف عدة حدائق من عصر إخناتون أثناء عملية التنقيب. كم منح رمسيس الثاني حدائق لمعبده في أبيدوس ، وأقام رمسيس الثالث حدائق لمعبد آمون في هليوبلس. انتشر وجود الحدائق في بافنية المعابد مثل معبد دندرة. كان للحدائق دور في الطقوس الدينية داخل المعابد. حيث تأثر ع الخضروات وتستخدم كقر ابين للالهه ، وفي الاحتفالات كان لا بد من تزيين تماثيل المعبودات بالزهور من هذه الحدائق.كانت هذه الحدائق تُروى بالري الطبيعي أو الري الصناعي.

الكلمات الدالة: حدائق ، معابد ، الدولة الحديثة

# Bibliography

Baum, N. (1988), <u>Arbres et arbustes de l'Egypte ancienne: la liste de la tombe thébaine d'Inéni</u> (no 81) (Vol. 31). Peeters Publishers.

Bellinger, J., (2008), Ancient Egyptian gardens, Sheffield: Amarna Publishing.

Breasted, J. H. (1907), Ancient Records of Egypt: Indicies (Vol. 5). University of Chicago Press.

Daines, A. (2008), Egyptian gardens. Studia Antiqua, 6(1), 5.

Daressy, G., (1892), Receuil de Cônes Funéraires I, Paris.

Donald, H., (Spring1992), <u>Sustainable Agricultur in Ancient Egypt</u>, In Agricultural History, Vol. 66, No. 2, History of Agriculture and the Environment.

Faulkner, R. O. (1991), <u>A concise dictionary of Middle Egyptian, Griffith Institute Ashmolean</u> <u>Museum Press.</u>

Gardiner, A. & Weigall, A. E. P. (1913), <u>Topographical Catalogue of the Private Tombs</u> <u>Thebes</u>, London.

Haring, B., (1913), <u>Divine Households</u>, <u>Administrative and Economic Aspects of the New</u> <u>Kingdom Royal Memorial Temples in Western Thebes</u>, Nederlands Instituut voor het Nabije Oosten /Netherlands Institute for the Near East (NINO), Leiden.

Manniche, L. (1989), An ancient Egyptian herbal, University of Texas Press.

Manning, G., (2002), Irrigation et état en Egypte antique, in AHS 57

Newberry, (1900), Extracts from my Notebooks (II), PSBA 22.

Peet, T. E., (2005), Great Tomb Robberies II-I, Oxford.

Renate, G., (2001), <u>Gardens, in Oxford Encyclopedia of Ancient Egypt</u>, vol 2, e.d Donald Redford, Oxford.

Sethe,K.,(1961), Urkunden der 18. Dynastie, IV: 352 (11-12). Berlin.

Steindorff, G. (1903), Urkunden des ägyptischen Altertums.

Wilkinson, A. (1998), The garden in ancient Egypt, Rubicon Press.

**المراجع العربية:** ادولف ارمان و هرمان رانكه(1907) ، <u>مصر والحياه المصريه في العصور القديمه,</u> ؟ترجمه و راجعه عبد المنعم ابو بكر، محرم كمال, مكتبة النهضة المصرية , 1907

ايهاب جميل(2012), النشاط الاقتصادي للمعبد في مصر القديمة خلال الدولة الحديثة, ماجستير, كلية الاداب, جامعه بنها,2012.

عادل احمد زين العابدين(2001)، <u>القرابين والرموز المقدسة المقدمة من الملوك للآلهة في مناظر الدولة الحديثة</u>، دكتوراه، طنطا، ٢٠٠١