# HONEY CONSUMPTION AND UTILIZATION IN LATE ANTIQUE EGYPT

BY

# Mona Sawy

Lecturer at Faculty of Arts/Assiut University

#### ABSTRACT

[EN] Bee honey (Api mellifera) is one of the most cherished and valuable natural substances that has been in constant usage since prehistoric times until the present day. The use of honey has a very long history; in the dynastic period, it was considered the «tears of the sun god» and was appreciated for its nutritional and medicinal properties. Honey has been used for various reasons, e.g., for medicinal purposes, cooking and religious rituals. The same use continued in Byzantine and Late Antique Egypt, as recorded in the Coptic texts, which mentioned the use of honey in food, drinks and medical remedies. I endeavor to present an analysis of the most important types of honey in the Late Antique period, in comparison with ancient Egyptian counterparts. This paper aims to highlight the various kinds of honey, receptacles and measures of honey. Moreover, it presents Coptic titles, professions and names associated with honey. It presents unpublished texts that provide information about honey. With this research, I want to investigate how and why the economic scope of apiculture in ancient Egypt evolved and the impact of this evolution on beekeeping and bee-related material culture, including titles and trade throughout post-Pharaonic and late Antique Egypt. The behavior and hive type of the Egyptian bee species, as well as the development of beekeeping from the predynastic until the New Kingdom, are briefly discussed in order to set the stage for the main debate. The primary topics of discussion are the trade, titles and material culture of bee products in post-Pharaonic and late Antique Egypt.

**KEYWORDS**: Honey, honeycomb, ostraca, pharmacy, ritual, remedy, wax.

# [A<sub>R</sub>]

#### استهلاك العسل واستخدامه في مصر القديمة المتأخرة

يُعد عسل النحل (Api mellifera) من أغلى واثمن العناصر الطبيعية التي كانت تستخدم باستمرار منذ عصور ما قبل التاريخ وحتى الأن ويعود تاريخ استخدام العسل إلى تاريخ طويل جدًا، ففي عصر الأسرات، كان يُعتبر العسل «دموع إله الشمس«، وقد حظي بتقدير كبير نظرًا لخصائصه الغذائية والطبية. وقد تم استهلاك العسل بطرق مختلفة، بما في ذلك الأغراض الطبية والطبي والطقوس الدينية. ولا يزال الاستخدام نفسه معروفاً في مصر البيزنطية ومصر القديمة المتأخرة من خلال النصوص القبطية التي تذكر استخدام العسل في الطعام والشراب والعلاجات الطبية. أسعى هنا إلى تقديم تحليل لأهم أنواع العسل، مقارنة بنظيراتها المصرية القديمة. يهدف هذا البحث إلى تسليط الضوء على أنواع العسل المختلفة وأوعيته ومقاييسه. وعلاوة على ذلك، تعرض الألقاب والمهن والأسماء القبطية المرتبطة بالعسل. وعلاوة على ذلك، تتناول هذه الورقة البحث، أربد أن أتحرى كيف ولماذا تطور النطاق الاقتصادي لتربية النحل في مصر القديمة، وكذلك كيف انعكس هذا التطور في تربية النحل والثقافة المادية المتعلقة بالنحل والألقاب والتجارة في مصر ما بعد الفرعونية ومصر القديمة المتأخرة. ستتم مناقشة سلوك ونوع خلية النحل المصري، وكذلك تطور تربية النحل في فترة ما قبل الأسرات حتى عصر الدولة الحديثة بإيجاز من أجل تمهيد الطريق للمناقشة الرئيسية. ستكون الموضوعات الرئيسية للمناقشة هي فترة ما قبل الأسرات حتى عصر الدولة الحديثة بإيجاز من أجل تمهيد الطريق للمناقشة الرئيسية. ستكون الموضوعات الرئيسية للمناقشة هي التجارة والألقاب والثقافة المادية لمنتجات النحل في مصر ما بعد الفرعونية ومصر القديمة المتأخرة.

Received: 2<sup>r</sup>-0<sup>1</sup>-2024. Accepted: <sup>1</sup><sup>r</sup>-05-2024. Available online: <sup>1</sup>0-06-2024.

DOI: 10.21608/jguaa2.2024.262656.1167 60 *JGUAA2* vol.10/2, 2025: 60-81

#### INTRODUCTION

The Egyptian bee is a member of the Apis mellifica honeybee species. Apis mellifica is native to the ancient worlds of the Middle East, Africa, Madagascar and Europe. It has a wide range of geographical variations that are distinguished by its environmental adaption<sup>1</sup>. The bee was a favorite insect among the ancient Egyptians from ca. 3500 BC until the Roman era. In ancient literature and tomb inscriptions, the bee was used to signify kingship and legitimacy in Lower Egypt<sup>2</sup>. It was mentioned in the Pyramid texts and Egyptian mythology and it was connected to several major gods. Its honey was employed in several religious rituals, offered as gifts to the gods and the dead and was utilized in many aspects of their daily lives<sup>3</sup>.

Budge claims that according to a magical papyrus in the British Museum (№10051, Salt 825), the gods had a strong relationship with specific plant substances: «When RA weeps copiously the water falling on the ground becomes «the flies that build,» i.e. bees and these, working with the flowers in every garden, produce honey and wax»<sup>4</sup>. All plant substances and tree oil mentioned in the text, «i.e. myrrh, cedar trees, papyrus plants and Nārt tree», were believed to be effective medicines and were integral in all the rituals and ceremonies related to the resurrection of the dead. In the case of honeybee, Budge argued that «in the Graeco-Roman period children and others were buried in pots filled with honey and the body of Alexander the Great is said to have been preserved in «white honey which had not been melted»<sup>5</sup>.

The Greek philosopher Aristotle, the first scientific beekeeper, introduced honey into scientific study for the first time in his book *Historia Anim alium*. Hippocrates, the physician, documented the health advantages of honey as well<sup>6</sup>. He recommended using vinegar and honey for pain, water and honey for thirst and a concoction of honey, water and other ingredients for fevers. Moreover, Hippocrates prescribed honey as a remedy for a wide range of ailments, such as baldness, eye disorders, wounds and contraception. Ancient Greek mythology prominently used honey and bees as emblems of virginity, rebirth and fertility.

The Romans had a great deal of experience with beekeeping, regulating it according to taxation and attaining excellent standards of productivity, variety and quality. Virgil, Varro, Columella and Pliny the Elder were among the Roman agricultural writers who investigated bees and beekeeping techniques extensively. The finest honey, according to the physician Pedanius Dioscorides, is delicious and strong, has a nice smell, is yellowish and is not liquid but «sticky» and fine<sup>7</sup>.

The Old Testament also refers to manna, a different and legendary sweetener said to have descended from the sky in the form of rain on chilly nights in the desert [FIGURE 1].

<sup>2</sup> THOMAS 1978: 32.

<sup>&</sup>lt;sup>1</sup> BECK 2021: 1-2.

<sup>&</sup>lt;sup>3</sup> EL-SEEDI *et Al.* 2022: 2–3.

<sup>&</sup>lt;sup>4</sup> BUDGE 1996: 24.

<sup>&</sup>lt;sup>5</sup> BUDGE 1996: 25.

<sup>&</sup>lt;sup>6</sup> GERMANIDO 2020: 5.

<sup>&</sup>lt;sup>7</sup> GERMANIDO 2020: 4.



[FIGURE 1]: Collecting the manna falling from the sky. French manuscript illumination, Old Testament, MS M. 638, folio 9v, 1244-1254 BC, Pierpont Morgan Library, New York GERMANIDOU 2020: 1.

In Byzantine Egypt, evidence of beekeeping is scarce compared to the ancient Egyptian period. Johnson and West argued that beekeeping was «probably more extensive than the records indicate». They reported that since there were no additional sweeteners, honey had to have been used. Dates, which were utilized as the poor man's honey, have always been abundant in Egypt; therefore, honey was likely used, not dates. Indeed, «date-honey» is mentioned. There is a chance that raisins were employed similarly as well. As for honey, the evidence seems to indicate that it was restricted to the wealthy. This might shed new light on how honey was used in these historical literary texts.

# I. HISTORICAL EVIDENCE OF BEEKEEPING

# 1-Old Kingdom

The earliest evidence of beekeeping in ancient Egypt dates back to 2450 BC from the sun temple of the king Nyuserra in Abusir (fifth dynasty). A relief from the Chamber of the Seasons shows beekeeping activities such as working in the hives, as well as the pouring and pressing of the honey. These images are now housed in the Egyptian Museum in Berlin. The relief illustrates in detail the removal of the comb from the hives as well as the extraction and storage of the honey [FIGURE 2]<sup>10</sup>. Hieroglyphic writings that translate to «hymning, filling, pressing and sealing of honey» between each

<sup>&</sup>lt;sup>8</sup> MIKHAIL 2000: 115.

<sup>&</sup>lt;sup>9</sup> MIKHAIL 2000: 115–116.

<sup>&</sup>lt;sup>10</sup> Kritsky 2010: 51.

scene serve as further evidence for what is visually represented<sup>11</sup>. The first image, which is located at the very left edge of the relief, shows a keeper kneeling before what appears to be nine hives, portrayed as pipes likely built out of mud or clay. He is carrying what appears to be an oval-shaped object, which is difficult to identify due to damage to the image, while simultaneously harvesting honey with the other hand. It is argued that the oval-shaped object could be a piece of cow dung, which was used to smoke the bees<sup>12</sup>. Or, while «calling for the queen», the keeper may have used an oval-shaped jug to regulate the swarm by enclosing the queen and the workers. This alternative theory is disputed by Kritsky<sup>13</sup>. Above the scene, the word *nft* is used to mean «creating a draught, or current of air» or «blowing or smoking»<sup>14</sup>. The word *nft* can also mean «loose» or «slacken»<sup>15</sup>.

In the second scene, three men are shown dumping the honey that has been extracted from the hives into larger pottery jars and other vessels placed on the ground. The term mh, which means «to fill» is placed above the scene. The man standing to the left is pouring the honey into a container with a nozzle on its side which might aid in separating the honey from the wax<sup>16</sup>.

The third scene, which is severely damaged, shows two men confronting one another. Based on the positioning of their hands and posture, it appears that a container—identical to the one in the previous scene—was originally between them<sup>17</sup>. The term [j]<sup>c</sup>f, appears above the image, which is translated to mean «to press» or «to wring out»<sup>18</sup>. The inscription indicates that they are likely pressing the honey to get rid of any undesired contaminants.

The final scene shows a kneeling man, facing right, in the process of sealing a round container in front of him to preserve the honey. The container is likely loaded with honey from the relief's last scene. The caption above the scene reads *htm bjt* meaning «to seal the honey», which indicates that the honey containers were sealed<sup>19</sup>. This relief is important evidence that beekeeping was a well-established industry in Egypt during the mid-late 5<sup>th</sup> dynasty<sup>20</sup>.

After Nyuserra's rule, the prominence of beekeeping in the Old Kingdom persisted under his successor Unas (?– *ca.* 2345 BC), the last ruler of the fifth dynasty<sup>21</sup>. Evidence for beekeeping could be found in a severely damaged relief (**FIGURE 3**) that originally adorned Unas's causeway in Saqqara, which featured a straightforward scene of «collecting honey». Three sealed, spherical honey containers, resembling those discovered at Nyuserra's sun temple, are shown in the image. Inscriptions on top of the

<sup>&</sup>lt;sup>11</sup> HAMMAD 2018: 3.

<sup>&</sup>lt;sup>12</sup> RANSOME 1937: 26.

<sup>&</sup>lt;sup>13</sup> Kritsky 2015: 1011; Hammad 2018: 3.

<sup>&</sup>lt;sup>14</sup> BECK 2021: 7.

<sup>&</sup>lt;sup>15</sup> Gardiner 1979: 574.

<sup>&</sup>lt;sup>16</sup> BECK 2021: 7.

<sup>&</sup>lt;sup>17</sup> RANSOME 1937: 27.

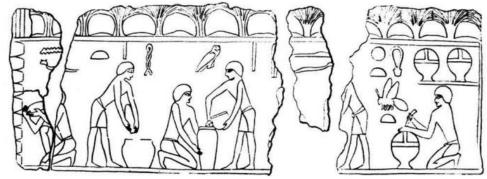
<sup>&</sup>lt;sup>18</sup> BECK 2021: 9.

<sup>&</sup>lt;sup>19</sup> BECK 2021: 9.

<sup>&</sup>lt;sup>20</sup> Hammad 2018: 4.

<sup>&</sup>lt;sup>21</sup> Netzley 2003: 297.

containers are assumed to read *«hekat* of honey»<sup>22</sup>. By the end of the Old Kingdom and throughout Pepi II's protracted rule (2278–2184 BC), honey had become crucial for trade<sup>23</sup>. The governor of Aswan, Sabni, undertook multiple trade missions to Nubia and brought back 100 donkeys loaded with honey, oil and other goods as gifts. His autobiography, carved on the walls of his tomb in Aswan, mentioned these and other goods<sup>24</sup>.



[FIGURE 2]: Relief from the Solar Temple of Nyuserra, fifth dynasty. KRITSKY 2010: 12.



[FIGURE 3]: The badly damaged relief of the causeway of Unas. KRITSKY 2015: 20.

# 2. Middle Kingdom

Senusret III's rule (1870–1831) in the Middle Kingdom provided other traces of beekeeping. Blocks that remained from his causeway at Dahshour depict a beekeeping relief, in which three bees are flying back and forth between two sets of horizontal hives like those at the *Nyuserra* Solar Temple. The relief attests to the fact that Old Kingdomstyle beekeeping techniques and procedures did not change much<sup>25</sup>. Additionally, beekeeping titles were still used in ancient Egyptian administration, as seen by the titles inscribed on a scarab seal from the thirteenth dynasty for a man named *Intef*. The scarab seal is currently housed in the British Museum Nr<sup>o</sup>.EA30550 [FIGURE 4]. The inscriptions on the back of the seal reads: *h<sup>c</sup>ty-<sup>c</sup>jmy-r bjtyw rkh-nsw* «Chief Beekeeper and King's Acquaintance»<sup>26</sup>.

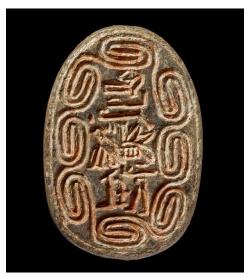
<sup>&</sup>lt;sup>22</sup> «A *hekat* is a common unit of volume used in ancient Egypt equivalent to 4.6 liters/1 gallon». KRITSKY 2013: 1186.

<sup>&</sup>lt;sup>23</sup> Hammad 2018: 4.

<sup>&</sup>lt;sup>24</sup> HAMMAD 2018: 4.

<sup>&</sup>lt;sup>25</sup> Kritsky 2015: 23

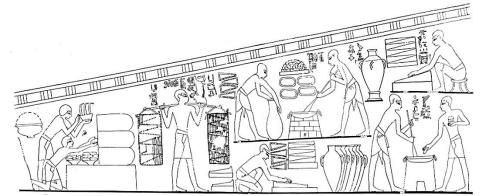
<sup>&</sup>lt;sup>26</sup> BECK 2021: 14.



[FIGURE 4]: Steatite scarab № EA30550, the 13th dynasty © The Trustees of the British Museum «The British museum»; https://www.bmimages.com/preview.asp?image=01613317959, accessed on (19/08/2023).

# 3-New Kingdom

Scenes depicting the importance of beekeeping, which grew in popularity during the New Kingdom, were found in several non-royal tombs, such as the tomb TT7388, which belonged to Amenhotep, Hatshepsut's Chief Steward<sup>27</sup>. Two significant episodes were depicted in Rekhmira's tomb (TT10094); first, he is shown receiving taxes in the shape of various gifts, including honey. Second, the most complete beekeeping scenario from ancient Egypt was also found in the tomb of Rekhmira, where the owner was seen supervising a team of workers as they provided food for the temple. Part of the scene showed two men preparing honey bread for the temple by mixing flour and honey, a scene that made researchers deduce that the ancient Egyptians were aware of the various sorts of honey, including the «white honey» of the Delta, which was solely used by monarchs and in temples. This kind of honey was thought to be entirely fresh and virginal after being initially removed from the combs by skilled beekeepers. It was also referred to as «white milk» [FIGURE 5]<sup>28</sup>. Other scenes were found in tombs TT69, belonging to Menna, TT52, belonging to Nakht and TT56 which belonged to Userhat<sup>29</sup>.



[FIGURE 5]: Part of the scene of preparing the provisions for the temple showing baking honey loaves. The tomb of Rekhmira at Thebe. HAMMAD 2018, PL.9.

<sup>&</sup>lt;sup>27</sup> HAMMAD 2018: 6.

<sup>&</sup>lt;sup>28</sup> Hammad 2018: 7.

<sup>&</sup>lt;sup>29</sup> Hammad 2018: 8-9.

## **4-Late Period**

Evidence of beekeeping throughout the Late Period came from two Saite-period tombs in Asasif: tomb TT414, belonging to Ankh-her and TT279 which belonged to Pabasa. The beekeeping scenes in the two tombs were strikingly similar, however, the depiction in the latter tomb is damaged. One of the most outstanding beekeeping scenes is depicted in two registers in Pabasa's tomb [FIGURES 6/A-B]. The first scene on the top depicted a standing figure dousing a storage jug with honey. The lower scene depicted a person bending down before eight hives with ten bees in each, arranged in two rows. It is argued that the man on his knees was a priest doing a cultic act while making a sign of respect with his hands<sup>30</sup>. By the Ramesside period, beekeepers were an integral part of the temple staff, as specified in the Elephantine Decree of Ramesses III, which ensured their protection. The presence of apiaries inside or close to the temple showed that the economic scale grew and expanded to meet demand from temples and other spheres of society. By this time, beekeeping reached a significant economic scale and all social classes in Egyptian society could easily access its products<sup>31</sup>.



[FIGURE 6/a]: The upper register of the beekeeping scene of the Tomb of Pabasa TT 297 HAMMAD 2018: 11



[FIGURE 6/b]: The lower register of the beekeeping scene of the Tomb of Pabasa TT 297. HAMMAD 2018: 11.

66

<sup>&</sup>lt;sup>30</sup> NAGY 1974: 313; BECK 2021: 24.

<sup>31</sup> BECK 2021: 29.

# 5-Ptolemaic, Greco-Roman and Late Antique Period

Through the Ptolemaic and Roman eras and beyond, the practice of beekeeping persisted in Egypt, specifically in Faiyūm<sup>32</sup>. Honey was used in traditional sacrificial ceremonies to the Nile in the Greco-Roman era and was among the materials offered to the sacred Nile River in Oxyrhynchus on 24 July 342 AD. Tourists used to offer honey to the sacred crocodiles in the Arsinoe region<sup>33</sup>. In addition, it was used as a main meal, as mentioned in the tenth book in Homer's Odyssey, written in 800 BC. It was used in many cooking recipes<sup>34</sup>. Moreover, beeswax was used to paint the famous Fayoum portraits, where the «encaustic» technique, which required beeswax, was used<sup>35</sup>. In Byzantium and the medieval West, beekeeping flourished until the discovery of sugar and its ultimate «dominance» as a primary sweetener. However, this amazing material is still an important component of our food and a representation of the strength and fragility of the natural world. Documents from Byzantine Egypt described people in settled regions who kept hives on the rooftops of their homes. These remarkable cases highlighted the fact that it is not impossible to abandon the potential of pre-modern urban beekeeping or to mix housing and beekeeping<sup>36</sup>.

There is only limited evidence of apiculture throughout the Late Antique period. Apicultural products are cited in many literary works, ranging from medical texts, pharmaceutical treatises and magical prescriptions to legal and administrative documents. Honey may be referenced in several legal and administrative documents as transactions, taxes, or rules. These documents could offer details on how honey was regulated and taxed in post-Pharaonic and early Islamic Egypt.

# 6-Late Antique Egypt

A contract, from the monastery of Apa Apollo near Hermopolis, contains information about leasing 214 beehives from the beekeeper Lazarus, provides evidence for beekeeping in Late Antique Egypt. On 12 June, three monks (Elias, Papnoute and Germanus) leased this number of beehives, demonstrating the value of honey in the diet of monks. The text also showed that monks kept bees on their own as well; the document shielded Lazarus from any objections made by Enoch, a competing beekeeper:

# P.Mon.Apollo I 47; SB Kopt. I 52

«I, the *papa* Elias with Brother Papnoute and the notary Germanus, the monks of the *topos* of Apa Apollo, write to Lazarus the son of Apollo, the beekeeper from Tbake. You drew up a lease for us for 214 beehives. Now, we are liable to you for Enoch, the beekeeper, so that he does not sue you over them. If he or anybody associated with him sues you, you are safe from them, for we have reached an agreement with him»<sup>37</sup>.

<sup>&</sup>lt;sup>32</sup> Sagrillo 2001: 43; Kelhoffer 2005: 61.

<sup>&</sup>lt;sup>33</sup> Shalaby 2022: 423.

<sup>&</sup>lt;sup>34</sup> Homer, 1949: 361; Shalaby 2022: 425.

<sup>&</sup>lt;sup>35</sup> Shalaby 2022: 441.

<sup>&</sup>lt;sup>36</sup> JIM/ÉNEZ 2022: 163.

<sup>&</sup>lt;sup>37</sup> Satzinger & Sijpesteijn 1988: 50.

Later, monks took up residence in Rameses IV's (KV2) tomb in the Valley of the Kings. The monks left a lot of traces of their presence behind. Besides discovering graffiti all over the tomb, the excavators discovered turned-over jars, or amphorae, that served as beehives<sup>38</sup>.

### **II. TERMS OF HONEY**

The native Coptic word for honey is євιω (єцιω; євιο $\chi^{39}$ ; єввιο $\chi^{40}$ ) with the nominal form євιє- being derived from the Egyptian bj.t. It corresponds to the Greek word μέλι, Arabic عسل <sup>41</sup>. The bee in Coptic is known by «чиєвιω «honey fly» or «bee» Egyptian 3fj n bj.t, is commonly abbreviated to  $bj.t^{43}$ . «Honeycomb» in Sahidic Coptic is μογχ $\chi^{44}$  and Bohairic νηνι $\chi^{45}$ .

The king's name during the first dynasty was who bity who united the two lands» or who joined the Sedge to the Bee». Since the bee was closely tied with royal ideology that defined the king as the sovereign of Lower Egypt, it was regularly utilised in ancient Egyptian literature throughout ancient Egyptian history up until the Roman period<sup>46</sup>.

евιω, when associated with fruits, most likely refers to thickened, cooked fruit juice, such as ечιω ννογεε which literally means «sycamore honey» and referring to sycamore syrup or juice (Ch 113). εвιω νвниνε «date honey» or «date syrup» is (Ch 216), εμω in Arabic. εчιω νκντε «fig honey» or «fig syrup» probably appears in (*P.Ryl. Copt*) as εчιω νκ\*\*ε. Till<sup>47</sup> reconstructed it as εчιω νκντε.

## III. TYPES OF HONEY

The Coptic texts recorded some different types of honey as follows:

**εΒΙΟ ΝΑΤΜΟΟΥ** «waterless honey» which is solid, non-liquid honey, according to Dioscorides<sup>48</sup>. It appears in several medical recipes, particularly for treating eye diseases such as those in Ch.89, Ch.195 and Ch. 202 which address a condition called CIOY (blot), as well as Ch.205, Ch.207 and Ch. 208. In Ch.177, it appears as a remedy for skin disease and in Ch 140, it is used to treat testicular pain<sup>49</sup>.

**εΒΙΟ ΝΑΤΑΙΚ** literally means «breadless honey»<sup>50</sup>. It refers to the honey that contains no solid components (?). Till assumed that this may be contrasted with eΒΙΟ ΝΑΤΜΟΟΥ<sup>51</sup>. It appears in an incomplete medical recipe cf. *O.Crum* 487<sup>52</sup>.

DOI: 10.21608/jguaa2.2024.262656.1167

<sup>&</sup>lt;sup>38</sup> CROMWELL: Bee Stories, https://papyrus stories.com/2018/06/25/bee-stories/, accessed on (04/11/2023).

<sup>&</sup>lt;sup>39</sup> CRUM 1939: 52b.

<sup>&</sup>lt;sup>40</sup> As in (O. Frangé, №.633, Fouilles belges dans la nécropole thébaine, №.291818, dates to 600 – 799 AD).

<sup>&</sup>lt;sup>41</sup> TILL 1951: 64.

<sup>&</sup>lt;sup>42</sup> CRUM 1939: 23b.

<sup>&</sup>lt;sup>43</sup> SAGRILLO 2001: 173.

<sup>44</sup> CRUM 1939:166a.

<sup>&</sup>lt;sup>45</sup> CRUM 1939: 227b.

<sup>&</sup>lt;sup>46</sup> Hammad 2018: 1.

<sup>&</sup>lt;sup>47</sup> TILL 1951: 66.

<sup>&</sup>lt;sup>48</sup> TILL 1951: 65-66.

<sup>&</sup>lt;sup>49</sup> SAWY 2022:157.

<sup>&</sup>lt;sup>50</sup> SAWY 2022: 110.

<sup>&</sup>lt;sup>51</sup> TILL 1951: 66.

<sup>&</sup>lt;sup>52</sup> OSTRACON, London, EEF 151, 7.3 x 8.4 cm, 7<sup>th</sup> –8<sup>th</sup> century BC Originating in Deir al–Bahari. SAWY 2022: 25.

**εΥΙΙΟ ΝΑΤΑΚΤΟΝ**: «Attic honey», ΑΤΑΚΤΟΝ= Greek ἀΤΤΙΚΟν<sup>53</sup>. This type of honey appears in a spell for a good singing voice<sup>54</sup>. It also appears in the love spell *Cairo JdE* 42573<sup>55</sup>, which instructs the use of the gall of the hare, the sweat of a person's chest and the blood of a big finger, semen and Attic (?) honey. It was given to the intended woman on the 14<sup>th</sup> day of the moon.

евю име: literally means «true honey» i.e., real or pure honey. This probably means honey that has not been adulterated with any additives. P.456 (Or. 6061, No.1088) mentions an account of genuine honey with some other stuff, such as wine olive oil, onion and mats, to be delivered on a boat. Also, O.Frange 100, a letter from Frange mentions oyaok евю име «a lok of pure honey». In addition, евю име «pure honey» is used for healing purposes as against gangrene in Ch.144.

**εΒιω ενιφογε†** its meaning is not clear and Till mentions that he does not know its meaning. This type of honey appears in the medical recipe *SBKopt* I 003, ll. 8-19 against knocking<sup>56</sup>.

**εβιε200**γ**T**: «Wild honey» appears in Or. 3581A(14)<sup>57</sup> and in Bodl. MS Copt. (P) a.2, 68-70 with other types of honey<sup>58</sup>. The significance of «wild honey» is that John the Baptist is said to have eaten it in the New Testament Gospels of *Mark* and *Matthew*. MK. 1:6c indicates that while in the wild, «John was in the habit of eating locusts and wild honey» and MT 3:4c claims that his provisions «consisted of» these foods<sup>59</sup>.

## IV. RECEPTACLE AND MEASURES OF HONEY

Various types of storage receptacles constructed of various materials were used to keep honey, according to historical papyri that document the interests and everyday activities of the Egyptians. Because they were aware of how easily heat and moisture might harm honey, various containers were used and then sealed to keep the contents safe<sup>60</sup>.

It might be challenging to estimate how much a vessel might contain in some cases. It is not always clear even when there is information about this in texts. Each of the three substances —wine, oil and honey—required different measurements; a similar amount of honey weighs more than a comparable amount of wine, although wine and oil are quite compatible<sup>61</sup>.

# The Most Common Measures of Honey in Coptic Texts Are

1. καπ<sup>62</sup> «receptacle or measure for corn and honey» appeared in *P.Ryl.Copt*. 355<sup>63</sup> a letter from a person named Apollo, who may be a monk to a superior; perhaps he requests

<sup>&</sup>lt;sup>53</sup> CRUM 1939: 52b.

<sup>&</sup>lt;sup>54</sup> BKU 8 (L.33).

<sup>&</sup>lt;sup>55</sup> Chassinat 1921.

<sup>&</sup>lt;sup>56</sup> TILL 1951: 66.

<sup>&</sup>lt;sup>57</sup> CRUM 1905: 74.

<sup>&</sup>lt;sup>58</sup> RICHTER 2017: 521.

<sup>&</sup>lt;sup>59</sup> Kelhoffer 2005: 59.

<sup>&</sup>lt;sup>60</sup> HAMMAD 2018: 12.

<sup>&</sup>lt;sup>61</sup> VORDERSTRASSE 2014: 207.

<sup>&</sup>lt;sup>62</sup> CRUM 1902: 113b.

<sup>&</sup>lt;sup>63</sup> CRUM 1909: 168.

πκαπ ενεσιω «a measure of honey» with 40,000 reeds and 4 workmen. It occurs as 6 and in *P.Mon. Epiph* 536<sup>64</sup>.

- 2. κελμ, κλε «vessel for liquids» oil and honey, Arabic نير 65.
- 3. κοεις πεβιω: «box of honey» appears as κοει πέβιω, κοει= κοεις in a part of a letter to be sent to the writer μωγεμε πράςτ «Moyses the fuller».

## V. MEDICAL USAGE OF HONEY

Ancient Egyptian medical writings contained about 500 recipes that reference honey to be used for various purposes. There were also recipe collections from the Ptolemaic and Roman periods that indicates that honey was used in medicine. Honey is found as an ingredient in various remedies, oral prescriptions, suppositories, ointments, bandages, incense and eye remedies. Von deines/Grapow assumed that honey was used as a sweetener in many medicinal recipes<sup>66</sup>.

Honey's numerous characteristics have been studied. Because of its acids, inhibins (chemicals that stop bacteria from growing) and antioxidants, it has an antibacterial effect. Due to the high sugar concentration in honey, microbes are inhibited by osmotic pressure, which helps prevent their growth. This sugar content also gives honey its hygroscopic properties and contributes to its preservative qualities. Its flavonoids, which are secondary plant compounds that have positive health effects, have anti-inflammatory and antispasmodic action on colds. Additionally, it benefits the cardiovascular and immunological systems. However, proper storage is crucial to maintaining these active components in honey for a long time. Honey is harmed by dampness, heat and light<sup>67</sup>.

Honey is included as an ingredient in medicinal preparations. Some medical recipes recommend cocking other ingredients in honey. However, most recipes do not require heat and only a few uses lukewarm honey. Till argues that honey is very popular for ingested medicines. Apart from the fact that healing powers were ascribed to honey itself, it was often used as a taste corrector because of its pleasant and strong flavor. Ingestible medicines containing honey are prescribed for the following diseases<sup>68</sup>.

# **Against Gas in the Stomach**

## Ch 69

- (135) Омеос оүстомахос ечтемтшм йтнү ере течао ніве тепін ыы вафоуф шынок≡
- (136)  $20\overline{\text{ch}}$  йаравікон ечіш өнооү калшс  $\uparrow$  нач п $\overline{\text{чо}}$ үшн чнаоүхаі
- (135) Likewise, a stomach heavy with gas, so that it stops blowing: Cumin, pepper, rue, mustard, (136) Arabic natron, honey; crush them well; give him to eat it; he will recover<sup>69</sup>.

<sup>64</sup> CRUM & EVELYN WHITE 1926: 289

<sup>65</sup> CRUM 1939: 102a.

<sup>&</sup>lt;sup>66</sup> GDM VI, 166 § 1; FEIERABEND 2009: 197.

<sup>&</sup>lt;sup>67</sup> FEIERABEND 2009: 197.

<sup>&</sup>lt;sup>68</sup> TILL 1951: 66.

<sup>&</sup>lt;sup>69</sup> My English translation of the French translation by CHASSINAT 1921: 176, with slight modifications.

# **Against Intestinal Worms**

Ch 110 prescribed a remedy against a specific type of worm called тнос наровар «the dust-Mos»<sup>70</sup> in which the meaning of нос was unknown<sup>71</sup>. The recipe recommended three remedies against worms: firstly, a suppository of fresh blue vitriol and wine, which would cause the worms to exit the body; secondly, smoking blue-vitriol with wheat broth to make the worms move towards the bottom; lastly, drinking one cup of purslane, cow milk and honey for three days<sup>72</sup>.

## Ch.110

(235) ота ере генміс йгнту фатмотте ероот де тміс фоєю ді йотанігам ечотфт (236) вноот (sic) гі нрп ф откаме нач сенаеї епеснт  $\bar{e}\bar{s}$  текті панікам етхеллос йсотф (237) течсфу теккапніze ймоч йелко йнам сенаеї епесент  $\bar{e}\bar{s}$  ніт ді йотегмотре (238) мін отерфте йеге мін отечіф † отапот нач йгнту йфі  $\bar{r}$  пестот йфорп

(235) Someone who has worms inside him to which is called to dust (?): Take fresh blue vitriol; (236) crush with wine; administer as a suppository, introduce them downwards the bottom. Or put vitriol in a wheat decoction; (237) he (the patient) drinks it and smokes it with the tamarisk bark; introduce them downwards the bottom or take purslane, (238) cow milk and honey; give a cup to him in three days. Cook them at first<sup>73</sup>.

# **Against Testicular Disease**

Ch 169 recipe treating testicles that are sick κατα ως. The word ως is for oog means «moon»<sup>74</sup>, which could perhaps mean «every month». However, the recurrent testicular disease is unknown<sup>75</sup>:

## Ch.169

(328) ογα έρε νείζοειτ ώωνε κατά ως θνώ ζενσώβε ντάφνε ώλωωλού ούοωμού ζι έβιω τζοού ζι ζέλω

(328) Someone whose testicles are sick permanently: Crush stack of laurel leaves; shake them in sieve; mix them with honey; make him drink with hot water<sup>76</sup>.

# **Against Rectum Pain**

Ch.226 recommended a specific remedy made from wolf dung. A remedy that is considered a part of medico-magical prescriptions<sup>77</sup>.

# Ch.226

(405) Омеос пместо ет†ккас копрос ихкикос ефршх ефрину гі ыы иахау оуофмоу гі ефіф тсоф ахха ді пве (sic) йфор $\overline{n}$  оудокімой пе

<sup>&</sup>lt;sup>70</sup> CRUM 1939: 184b.

<sup>&</sup>lt;sup>71</sup> TILL 1951: 24.

<sup>&</sup>lt;sup>72</sup> SAWY 2022: 146.

<sup>&</sup>lt;sup>73</sup>My English translation of the French translation by CHASSINAT 1921: 234.

<sup>&</sup>lt;sup>74</sup> CRUM 1939: 257b.

<sup>&</sup>lt;sup>75</sup> SAWY 2022: 160.

<sup>&</sup>lt;sup>76</sup> My English translation of the French translation by CHASSINAT 1921: 285.

<sup>&</sup>lt;sup>77</sup> SAWY 2022: 145.

(405) Likewise: The great intestine that has pain: Burnt wolf droppings, crushed with white pepper; knead them with honey, drink it, but take your salary first, it is tested<sup>78</sup>.

# **Against Inner Diseases**

Ch.234 prescribes remedy for oga eqwwne epequagogn  $\overline{en}$  singwne nim «someone who suffers from any illness in his inner parts»:

#### Ch.234

- (416) ογα εψφωνέ επεψαλέογν $^{79}$   $\overline{\text{n}}$  σίνφωνε νιμ сμήρνης  $\raiseta$  α αραβικόν  $\raiseta$   $\ddot{\text{e}}$  κακίας (sic)  $\raiseta$   $\ddot{\text{e}}$   $\ddot{\text{e}}$  α η δίνος  $\raiseta$   $\ddot{\text{e}}$   $\ddot{\text$
- (416) Someone who suffers from any ailment in his inner parts (i.e. internal diseases): Myrrh one drachma, gum Arabic five drachmas, acacia four drachmas, (417) costus one drachma, wild rue four drachmas; crush them; knead them with honey; apply to him (the patient) with warm water<sup>80</sup>.

# **Against Vomiting**

P.Carlsberg 500 recommends an oral remedy against vomiting:

етве піршне кавох птеутрофн песперма птеївотапн гімооу гін[р]п Рієвіш ма[рец]сш циало «For persons who vomit their food: The seed of this herb together with water and wine and honey. Let him drink, he will recover».

## For Intestine

Chassinat papyrus recipe **Ch.75** prescribed a drinking remedy  $\tau c \omega$  for the large intestine: oytcw etbe thoo value  $\bar{\nu}$  «A potion to the large intestine» consists of: myrrh, castoreum, green vitriol, spurge and honey<sup>81</sup>.

**Ch.74** recommends канарісмос<sup>82</sup> «Laxatives» consist of one ounce of pepper, watercress seed, scammony and eight ounces of natron and spurge which are to be crushed well and mixed with honey.

## Gums have Gangrene

#### Ch.159

(314) oya nta haay nneqnaxe poyamome $^{799}$  xi  $\bar{z}$  nkpatoc napatoc naptimecic eypox mn oyeyid xpd epooy

«(314) Someone whose gums have gangrene: Take seven burnt ambrosia branches and honey; use for them».

# **Against Eye Diseases**

# P.Sarga 21, ll. 7-9

одсиде ивунце бієвіт и одвуу єв $\downarrow$  моуул у це ивуу иув [ $\varpi$ ] к бімоод иємущу бієвіт  $\downarrow$ еї є́о [....]одмойє

 $<sup>^{78}</sup>$  My English translation of the French translation by Chassinat 1921: 317, with slight modifications.

<sup>&</sup>lt;sup>79</sup> 20γn «inward parts». CRUM 1939: 686b.

<sup>&</sup>lt;sup>80</sup> My English translation of the French translation by CHASSINAT 1921: 322, with slight modifications.

<sup>81</sup> SAWY 2022: 139.

<sup>82</sup> Cf. καθαρισμός «cleansing, purification, purificatory offering». LIDDELL, SCOTT & JONES (eds.) 1996: 850a.

«An eye that waters: ... of raven's eye (8) and water of onions and honey. Apply (them) to [it ... a goat's gall and honey ...»<sup>390</sup>.

#### Ch.89

- (172) оүнөөү  $\bar{\text{н}}$ и оүсөү ең $\bar{\text{e}}$ и оүвах копрос $^{410}$  йберомпе өнөөү (sic) кахшс гі еңіш йатмооү хрш
- «(172) A cataract and a blot in an eye: pigeon droppings; crush them well with honey without water; apply»<sup>411</sup>.

**Ch.204 & 205** recommend honey as a remedy against eye that have mist - for treating the darkening of the eye:

#### Ch.204

- (371) Omeoc ουγλοςτη  $\bar{\eta}$ η ήβαλ ες ευο ήμοου αμμωνίακου θυμιματός  $\bar{\theta}$  νίτρον  $\bar{\theta}$  ευιώ πατμοού χρ
- «(371) Likewise: A mist in the eyes or (eyes) that are suffering from cataracts: ammonia gum two obols, natron two obols, honey without water; apply»<sup>416</sup>.

#### Ch.205

- (372) Likewise: Honey without water, calf's gall; apply<sup>417</sup>.

# **Against Cataract**

#### Ch.165

- (323) оү<br/>а ере мецвал оүй моүй<br/>е́о́үн сіфе й<br/>ентс сіфе йер<br/>бої евіф к̄рмес йхартн<br/>с йрієратікон хр
- (323) Someone whose eyes have cataract: Gall of ichneumon (?), gall of chicken, honey, hieratic paper ash; apply<sup>424</sup>.

## VI. COPTIC TITLES, PROFESSIONS AND NAMES ASSOCIATED WITH HONEY

In Coptic texts, particularly in legal documents, lists and letters, several jobs related to honey are mentioned, including honey delivery. These roles appear as follows:

caneвเบ «honey dealer (seller)»:

In a list form the monastery of Epiphanius in Thebes, the honey-seller Aron αρων βελη ςανεββιω was mentioned:

## Epiph. 561, a list (?)

«The mother of T …, (the) smith; Aron the blind, the honey-seller; Anatolius (son?) of Thabau; the camel 4 Epiphanius wished (?) to bring up»<sup>83</sup>.

A honey-seller canebiw was recorded in an inscription at Bawit $^{84}$ : মনম মাত্রমিক্ত poic efar пансе псаневію «Apa Apollo watch over the master Paese the honey dealer» $^{85}$  In

<sup>83</sup> CRUM & EVELYN WHITE 1926: 295.

<sup>84</sup> Maspero & Drioton 1932–1943: 99, №. 268 1.2.

<sup>85</sup> My translation

addition, it appeared in the unpublished letter No 272 (CC) $^{86}$ : Да]үвід псаневію «David the honey dealer» $^{87}$ .

євіт; євєїт «honey dealer»

The second title associated with honey was εΒΙΤ; εΒΕΙΤ (pl. εΒΙΕΤΕ), which means «honey dealer» was found in P.Mich.inv. 2066, (recto) dating back to the 6th-7th centuries The title εΒΕΙΤ appeared in P.Mon.Apollo I 47; SB Kopt. I 5291, which was a deed for surety from the Hermopolite Monastery of Apa Apollo and associated with two names, i.e., απολλω πεβιετ «Apollo the honey-dealer» and ενωχ πείβιετ «Enoch the honey-dealer».

During Pharaonic period, some beekeepers were part of the temple staff. Beekeepers could be found serving in Coptic monasteries<sup>92</sup>. Up to the Middle Ages, bees were kept in monasteries. A papyrus from the monastery of Apa Apollo in Hermupolites states the following:

«You have given us a lease for two hundred and fourteen<sup>93</sup> honeybees. We now vouch for Enoch, the beekeeper, that he will not deceive you in their affair. If he deceives you - (he) or a man of his - you are free with regard to them... And if anything happens to you in your place concerning the matter of our bees, then we reject your claim»<sup>94</sup>.

According to this security certificate, the monastery rented 214 hives of bees to Lazaros, a beekeeper from Tbake. The bees were looked after by Enoch, the beekeeper of the monastery and his staff. The honesty of Enoch, the monastery's beekeeper, was guaranteed by this letter. However, as Lazaros was the renter, the monastery was not responsible for any harm the bees could create<sup>95</sup>.

Few texts addressed the amount of hives over which the owner or a beekeeper was responsible. From the security document mentioned above it could be seen that the monastery leased 214 of its hives. It could be assumed that it had other sticks. Some surviving documents from the Ptolemaic period gave further numbers.

One owner leased 1,000 hives to beekeepers in Herakleopolis and Memphis (PCZ III 59368.). Two brothers owned 487 hives, which were divided between the Herakleopolites and the Memphites. Eighty-seven of these were farmed in Toka. Another beekeeper from Herakleopolis had 5,000 bee colonies in his homeland and Oxyrhynchus (*P.Oxy*. Inv. 34 4B.73/B (1–2)a)%. These sources showed that in addition to

<sup>86</sup> CRUM 1921: 74.

<sup>87</sup> My translation

<sup>88</sup> CRUM 1939: 52b.

<sup>&</sup>lt;sup>89</sup> «*P. Mich.* inv. 2066; Recto», https://quod.lib.umich.edu/a/apis/x-8791/2066r.tif. University of Michigan Library Digital Collections, accessed on (21/11/2023).

<sup>90 «</sup>Metadata», https://papyri.info/apis/michigan.apis.8791, accessed on (22/12/2023).

<sup>&</sup>lt;sup>91</sup> Satzinger & Sijpesteijn 1988: 49–51; Clackson 2000: 122, №.50.

<sup>&</sup>lt;sup>92</sup> FEIERABEND 2009: 75.

<sup>&</sup>lt;sup>93</sup> It is argued that the number of 214 honey bees probably meant the individual hives, as a bee colony consisted of 30,000-70,000 bees. FEIERABEND 2009: 75.

<sup>&</sup>lt;sup>94</sup> English translation from the German translation of SATZINGER & SIJPESTEIJN 1988: 49f.

<sup>&</sup>lt;sup>95</sup> FEIERABEND 2009: 75.

<sup>&</sup>lt;sup>96</sup> PARSON 2007: 111f.

small beekeeping operations with a few hundred hives, there were also those with several thousand hives<sup>97</sup>.

#### VII. LITURGICAL USES OF HONEY

Honey was employed in several different ways and associated with numerous theological and metaphysical ideas following the birth of Christianity. For instance, John the Baptist subsisted in the wilderness on a diet of locusts and wild honey, whereas Jesus, following his resurrection, consumed a honeycomb and fish.

Honey was used for liturgical purposes, in BM 1007 (Or. 5899 (1)) Fol. a: a prayer of exorcism, contained magical words and an invocation to the angel Gabriel to be recited over water, oil and honey.

In Canones Apostolorum1: ογος ογέρω† νεω ογέβιο εγθητ έπχινμος ύνισος ύτε νιι† χε αγχος χε †να† νωτεν ύογκαςι εφρα† ύέρω† ει έβιο β8. And a milk with a honey agrees to the filling/completion of the promises of the Fathers 99.

BKU 1 8, l. 33, (BERLIN P. 8318)<sup>100</sup> Magical text for good singing voice contained list of martyrs of Sebaste: «Alaphabe Ephouau Saenouoph Kaaphphe Koph! I adjure you by your names and your powers and your amulets, so that you might work your 20 powers upon it and perform for me a good thing without any evil, 1 but good for me. When I drink from it, 1 let my tongue become exalted like a sweet trumpet 1 in my mouth, like raw honey»<sup>101</sup>.

# VIII. HONEY AS NUTRIENT CONTENT

There is evidence of honey consumption in the Byzantine and Arab eras. Contrary to what the archives showed, «beekeeping» was probably more widespread in Byzantine Egypt than in previous periods. Given the lack of additional sweeteners, this must have been the case<sup>102</sup>. Before sugar was introduced after the Crusades, honey was the only sweetener that was available for many years and was the main ingredient in different kinds of cakes<sup>103</sup>. In addition, honey was needed as an ingredient for intoxicants and pastries. Due to its antioxidant capabilities, it was a welcome addition to a variety of recipes for cooking, baking, herbal tea and food preservation.

Honey was a vital food item served during certain days and seasons in monasteries. Furthermore, wax was a fundamental component of the so-called encaustic technique and was combined with Chios mastic to create a dye that applied to sculptures in addition to its obvious application for candles<sup>104</sup>. Moreover, as I discuss below, honey was widely used in medical recipes. Both honey and wax were used for many purposes in several medical recipes.

<sup>&</sup>lt;sup>97</sup> FEIERABEND 2009: 76.

<sup>98</sup> DE LAGARDE 1883: 257.

<sup>99</sup> My translation.

<sup>&</sup>lt;sup>100</sup> Published without image, Translation: Lexa 1925: 163, №.III; Kropp 1931-2: 109–113, №.33; Meyer & Smith 1994: 244–246, Nr<sup>o</sup>.121.

<sup>&</sup>lt;sup>101</sup> MEYER & SMITH 1994: 246.

<sup>&</sup>lt;sup>102</sup> MIKHAIL 2000: 116.

<sup>&</sup>lt;sup>103</sup> BAGNALL 1993: 31.

<sup>&</sup>lt;sup>104</sup> GERMANIDOU 2017: 96.

Dates, which was like a cheap version of honey, have long been abundant in Egypt. In fact, «date honey» was mentioned in texts. Similar applications existed for raisins as well. Data suggests that mostly wealthy people used it, which might provide fresh insight into the use of honey in historical literary works. Honey was sometimes thought to represent wealth and nobility<sup>105</sup>. Here are some Coptic desserts food names: The Bohairic word кнві; кєві means «honey cake»<sup>106</sup>.

*Mizr*: Honey appeared to be used in some drinks in the Islamic period, such as a specific type of beer called *mizr*, which seems to have been produced from grains (and sometimes honey) $^{107}$ .

Honey is frequently mentioned in the Bible as food. In fact, John the Baptist mostly lived off of locusts and wild honey *«John wore clothing made of camel's hair, with a leather belt around his waist and he ate locusts and wild honey»* 108.

The Bible has numerous references to honey, including its use as nourishment along with milk and butter: «It shall be in that day that a man will keep alive a young cow and two sheep; So it shall be, from the abundance of milk they give, that he will eat curds; For curds and honey everyone will eat who is left in the land» <sup>109</sup>. «And because of the abundance of the milk they give, there will be curds to eat. All who remain in the land will eat curds and honey» <sup>110</sup>.

Honey was used to make a special kind of food called «manna»: Ayw Aymoyte eneqpan not nother micrahl cenhanna neqo Le ntze noyerewhy eqoyoba epeteythe o ntze noyarkpic znoyebi $\omega^{111}$  «The people of Israel called the bread manna. It was white like coriander seed and tasted like wafers made with honey»  $^{112}$ .

When Jesus first appeared to his apostles after his resurrection, he asked for food and received a honeycomb and grilled fish. To prove to the apostles that he was indeed raised from the dead and wasn't just a ghost or an illusion, Jesus ate the food: *«But while they still did not believe for joy and marveled, he said to them, «Have you any food here?» So they gave Him a piece of a broiled fish and some honeycomb. And He took it and ate in their presence»*<sup>113</sup>.

Honey was eaten with luctus: *«John's clothes were made of camel's hair and he had a leather belt around his waist. His food was locusts and wild honey*»<sup>114</sup> and with flour: *«So you were adorned with gold and silver; your clothes were of fine linen and costly fabric and embroidered cloth. Your food was honey, olive oil and the finest flour. You became very beautiful and rose to be a queen*»<sup>115</sup>.

```
<sup>105</sup> MIKHAIL 2000: 116.
```

-

<sup>&</sup>lt;sup>106</sup> CRUM 1902: 99b.

<sup>&</sup>lt;sup>107</sup> MIKHAIL 2000: 107.

<sup>&</sup>lt;sup>108</sup> *MK.* 1: 6.

<sup>&</sup>lt;sup>109</sup> Is. 7:21-22.

<sup>&</sup>lt;sup>110</sup> Is. 7:22.

<sup>&</sup>lt;sup>111</sup>CAROLINE T. SCHROEDER, ZELDES *et Al.*, *Coptic SCRIPTORIUM*, 2013–[2023]; http://copticscriptorium. org, accessed on (02/01/2024).

<sup>&</sup>lt;sup>112</sup> Ex. 16: 31.

<sup>&</sup>lt;sup>113</sup> *LK*.24: 42.

<sup>&</sup>lt;sup>114</sup> *MT*.3: 4.

<sup>&</sup>lt;sup>115</sup> Ez.16: 13.

Moreover, with milk only «Your lips drop sweetness as the honeycomb, my bride; milk and honey are under your tongue. The fragrance of your garments is like the fragrance of Lebanon»<sup>116</sup>.

## IX. HONEY AND MAGIC

Honey played an essential role in Coptic magical formulae. A great number of magical formulae recommended reciting the prayer or spell on honey, such as *P. Lond. Copt.* 1007/ British Library *MS Or.* 5899(1)<sup>117</sup>, a part of a prayer of exorcism. The prayer contained magical words that invoke the angel Gabriel, to be recited over water, oil and honey<sup>118</sup>.

- «(a) THEMOUPH [...] ZARZAL ... PHIRACHACHA ..., send me today, Gabriel, the archangel who has received the good news of the son of the almighty until today, so that he might come down on this water and this oil [...] and this honey and mark the water and fill it with healing and favor and peace and uprightness and salvation»<sup>119</sup>.
- *P. Mich. MS* 136, 2-14<sup>120</sup> a book of ritual spells for medical purposes, contained a spell for a malignant disease; it recommended using honey and other ingredients. Another recipe recommended that honey be used on sores «A little fresh fat from a sow: Grind it. Put it on sores that have appeared at the anus, along with real honey»<sup>121</sup>.

In  $K\ddot{o}ln$  N°.20826<sup>122</sup>, honey appeared to be used in the ritual with other power words, which were recommended to be written on the tongue of the person using the spell for protection. In addition, honey was recommended to be used in a Love spell *Cairo IdE* 42573, 3, 1l.1-5:

оуфф бап псіфе мпсарабфф ми твюте итекместирнт міл песноч епекноб итниве ми пк[[спріі]] твооу гії ечіф натактон  $^{123}$  исоу  $\overline{\text{LL}}$  мпоор сприа тач нас нес $\dagger$ хос

«Desire. Take the gall of the hare and the sweat of your chest and the blood of your big finger and your [[semen]]. Purify them with Attic (?) honey. On the 14<sup>th</sup> day of the moon. Semen. Give it to her, fasting»<sup>124</sup>.

<sup>&</sup>lt;sup>116</sup> So. 4: 11.

<sup>&</sup>lt;sup>117</sup> CRUM 1905: 417–418, №.1007. Translations: KROPP 1931: 123, №.38; MEYER & SMITH 1999: 103–104, №.57.

<sup>&</sup>lt;sup>118</sup> CRUM 1905: 417.

<sup>&</sup>lt;sup>119</sup> Translation: MEYER & SMITH 1994: 103.

<sup>&</sup>lt;sup>120</sup> Worrell 1935: 17–37, №.4; Meyer & Smith 1994: 83–90, №.43; Pernigotti 1995: 3715–3717, №.21.

<sup>&</sup>lt;sup>121</sup> Translation: MEYER & SMITH 1994: 89.

<sup>&</sup>lt;sup>122</sup> RÖMER & THISSEN, 1990: 175–181; VAN DER VLIET 1998: 119–122; MEYER & SMITH 1994: 110–111, Nr<sup>o</sup>. 59; SCHENKE 2017: 247–252.

<sup>&</sup>lt;sup>123</sup> ατακτον, i.e, Greek ἄτακτον mistake for ἀττικόν? CRUM CD 52B or ἄκρατος «unmixed» cf. CDO sv. ακρατον: ἄτηκτος CHASSINAT, www.coptic-magic.phil.uni-wuerzburg.de/index.php/text/kyp-t-1680, accessed on (19/03/2023).

<sup>&</sup>lt;sup>124</sup> KORSHI DOSOO, EDWARD O.D. & PREININGER (eds.) «KYP T1680: Love spell», Kyprianos Database of Ancient Ritual Texts and Objects, www.coptic-magic.phil.uni-wuerzburg.de/index.php/text/kyp-t-1680, accessed on (11/10/2023).

Coptic magical texts contained a number of ritual analogies to animals and the honey-bee was used as one of these analogies in a spell for sex and favor, i.e., *London Hay* 10414a (recto)<sup>125</sup>.

«That she may be (like) a honey (-bee) seeking (honey), a bitch prowling, a cat going from house to house, a mare going under (sex-) crazed (stallions)»<sup>126</sup> (verso) «At the moment that you will sprinkle yourselves in the dwelling place and gather for me the entire generation of Adams and all the children of Zoe, as they bring me every gift and every bounty, they must gather before me, all of them, like a honey bee into the mouth of a beehive»<sup>127</sup>.

Berlin 8318/ BKU 1 8<sup>128</sup>, a spell for a good singing voice, recommended using wild honey to cause drunkenness, along with other ingredients: «This is the mixture in the chalice: 21 grape seeds; 12 grains wild mastic, with a little wild honey diluted with a little Tobe water [...] and grapes (?) and a torch that burns three days; this bit of white wine with a ... on a reed mat with clothing ... at night while you eat bread ... these ... when ... write in a book, bind ... another one, is bound to his mouth ... is bound ... drink it»<sup>129</sup>.

Another spell for the same purpose, i.e. a good singing voice, is P.Yale inv.  $1791^{130}$ , where white honey was mentioned with other ingredients: «White honey; white wine; To be water (?). Offer greetings (?) 21 times (?), ... 21 times (?). This is the preparation of the chalice»<sup>131</sup>.

London Oriental Manuscript 6794<sup>132</sup>, a spell to obtain a good singing voice, «You write the amulets with real honey, undiluted, unscorched, on an alabaster tablet. Wash them in white wine. White grapes-21. Wild mastic-21. Arabian gum, called «claw.» A white robe»<sup>133</sup>. The Coptic hoard of spell Michigan 593<sup>134</sup> is a codex with 20 pages, dating back to the 4<sup>th</sup>-6<sup>th</sup> century BC. It lists honey twice within the spell: the first time involves reciting the spell on honey 15 times and the other time instructs one to eat the fried hawk's egg with honey: «You are to recite it seven 15 times over some honey and some licorice root. It sets a reminder within you, for ever and ever, in your mind and spirit. Take a hawk's egg and fry it, then eat it over the honey, purifying yourself for forty days until its mind appears to you»<sup>135</sup>. The spell contains Voces magicae and the invocation is used for various purposes such as reptile bites, fevers, swellings, spleen

 $<sup>^{125}</sup>$  Meyer & Smith 1994: 169–170, №.80; Crum 1934: 1/2, 51–53; 3/4: 195–200; Kropp 1930–1931: vol.1, №. M; vol.2, №. XIV; Zellmann–Rohrer 2020: 169–179; Zellmann–Rohrer 2022: 1049–1064.

<sup>&</sup>lt;sup>126</sup> Translation: MEYER & SMITH 1994: 167.

<sup>&</sup>lt;sup>127</sup> MEYER & SMITH 1994: 169.

<sup>&</sup>lt;sup>128</sup> Lexa 1925: 163, №. 3; Kropp 1931: 109–113, №.33; Meyer & Smith 1994: 244–246, №.121.

<sup>&</sup>lt;sup>129</sup> MEYER & SMITH 1994: 246.

<sup>&</sup>lt;sup>130</sup> «This papyrus is inscribed on both sides and contains two individual ritual instructions, the first one is for gaining a good singing voice, the second is a love spell for attracting a woman. Both spells are accompanied by drawings and magic signs». DZWIZA 2013: 850–854, SAP-K-XY-003; 855–858, SAP-K-XY-004. MEYER & SMITH 1994: 246–248, №. 122; 348–353; PETERSEN 1964: 38–39, №.53.

<sup>&</sup>lt;sup>131</sup> MEYER & SMITH 1994: 47.

<sup>&</sup>lt;sup>132</sup> Kropp 1931.2: 104–109, №. 32; Meyer & Smith 1994: 279–280, №.129.

<sup>&</sup>lt;sup>133</sup> MEYER & SMITH 1994: 280.

<sup>&</sup>lt;sup>134</sup> MEYER & SMITH 1994: 304–310.

<sup>&</sup>lt;sup>135</sup> MEYER & SMITH 1994: 305.

diseases, headaches, vertigo, hemorrhages, against enemies, for protecting the house and sheep, for protecting ships at sea, for desire, evil eyes and for other purposes.

## X. CONCLUSION

Ancient Egyptians favored bees because these insects were associated with royal ideology, as a symbol of legitimacy. This is why bees are shown on the cartouches of all reigning sovereigns throughout Egyptian history. Bees were extremely important since they were connected to several gods in the ancient Egypt pantheon.

Ancient Egyptians understood the value of bees because they were the only source of honey. They began beekeeping in the Old Kingdom and the practice continued through to the Roman Empire. In addition, honey was associated with certain religious ideas and practices; certain priests adopted the alias of beekeepers, taking responsibility for gathering the honey needed for religious rites dedicated to various gods, including Amun and Min. In the post Pharaonic and Late Antique periods, honey was used in a wide variety of applications and connected to a wide range of theological and philosophical concepts. John the Baptist, for example, survived in the desert by eating locusts and wild honey, whereas Jesus, after his resurrection, ate fish and honeycomb. In addition, honey appeared in daily life texts such as letters, sales contracts and in some magical spells. Despite the paucity of sources on beekeeping in Coptic texts, honey was a major ingredient in many medical prescriptions. Thus, honey was considered to be one of the most important products that had nutritional, economic, religious, magical and medicinal value throughout the ages.

## **BIBLIOGRAPHY**

- BAGNALL, R.S.: Egypt in late antiquity. Princeton (Princeton University Press) 1993.
- **BECK**, M.: «The Economic Scale of the Apiculture Industry in Ancient Egypt: An Analysis of Beekeeping and its Wider Impact on Ancient Egyptian Society», PhD Thesis, Swansea University, 2021.
- BUDGE, E.A.W.: The Divine Origin of the Craft of the Herbalist, New York (Dover Publications) 1996.
- CRUM, W.E.: Catalogue of the Coptic Manuscripts in the British Museum, London (British Museum) 1905.
- CRUM, W.E.: «Magical Texts in Coptic I», Journal of Egyptian Archaeology 20, 1934, 51–53.
- CRUM, W.E.: «Magical Texts in Coptic II», Journal of Egyptian Archaeology 20, 1934, 195–200.
- CRUM, W.E.: A Coptic Dictionary, Oxford (Clarendon Press) 1939.
- CRUM, W.E., & Evelyn-White, H.G.: *The Monastery of Epiphanius at Thebes*, vol.2, New York (The Metropolitan Museum of Art Egyptian Expedition) 1926.
- **CLACKSON**, S.J.: Coptic Documents Relating to The Monasteries of Apa Apollo at Bawit and Titkooh in the Hermopolite Nome, Oxford (Alden Press) 2000.
- Dosoo, K.: «Horus, Sabaoth, Satanas: La 'Bibliothèque magique de Berlin' et les autres fonds d'archives magiques de l'Égypte romaine et des premiers siècles de la période islamique», In *Magie et sciences occultes dans le monde islamique*, edited by JEAN-CHARLES COULON, Marseille (Diacritiques Éditions) 2021.
- **DZWIZA,** K.: Schriftverwendung in antiker Ritualpraxis anhand der grichischen, demotischen und koptischen Sammelschriften des 1.-7. Jahrhunderts, 2: Katalog, Erfurt, Heidelberg (University Libeary Erfurt) 2013
- EL-SEEDI HR *et Al.*: «A Spotlight on the Egyptian Honeybee (Apis mellifera lamarckii)», *Animals* 12, 2022, 2749.
- FRANTIŠEK, L.: La magie dans l'Égypte antique de l'ancien empire jusqu'à l'époque copte, vol.2, Les textes magiques. Paris (Librairie orientaliste P. Geuthner) 1925.
- **FEIERABEND**, B.S.: «Biene und Honig im pharaonischen Ägypten. Eine Studie anhand schriftlicher und bildlicher Quellen», 2 vols., *PhD Thesis*/Johannes Gutenberg-Universität Mainz, 2009.
- GARDINER, A.: *EGYPTIAN GRAMMAR:* Being an Introduction to the Study of Hieroglyphs, London (Griffith Institute Ashmolean Museum / Oxford University Press) 1979.
- GERMANIDOU, S.: «Honey Culture in Byzantium: An. Outline of Textual, Iconographic and Archaeological. Evidence», In *Beekeeping in the Mediterranean from Antiquity to the Present*, edited by Hatjina, F.; Mavrofridis, G.; Jones. G.R., 93–104, Nea Moudania, (Hellenic Agricultural Organization 'Demeter.') 2017.
- GERMANIDOU, S.: *The Ancient Lands of Honey: Middle East, Egypt, Greece*, 2020, https://www.academia.edu/42971788/The\_Ancient\_Lands\_of\_Honey\_Middle\_East\_Egypt\_Greece, accessed on (20/12/2023).
- JIMÉNEZ, J.M.: «Appiaria vel in civitate vel in villa: Apiculture in the Early Medieval West», in *New Approaches to the Archaeology of Beekeeping*, edited by WALLACE-HARE, D., 159–171, Oxford (Archaeopress) 2000.
- **KELHOFFER**, J.A.: «John the Baptist's "Wild Honey" and "Honey" in Antiquity», *Greek*, *Roman and Byzantine Studies* 45, 2005, 59–73.
- KRITSKY, G.: The Quest for the Perfect Hive, A History of Innovation in Bee Culture, Oxford (Oxford University Press) 2010.
- KRITSKY, G.: «Ancient Beekeeping in Egypt: the Honey-Collection Scene from the Causeway of Unas of Ancient Egypt's Fifth Dynasty», *American Bee Journal* 153/11, 2013, 1185–1187.
- KRITSKY, G.: The Tears of Re: Beekeeping in Ancient Egypt, Oxford & New York (Oxford University Press) 2015.
- **KROPP,** A.: *Ausgewählte koptische Zaubertexte. Textpublikation. Bruxelles: Édition de la Fondation Égyptologique Reine Élisabeth,* 3 vols., Brüssel (Édition de la Fondation égyptologique reine Elisabeth) 1930–1931.
- **LEXA,** F.: La magie dans l'Égypte antique de l'ancien empire jusqu'à l'époque copte. Les textes magiques, vol.2, Paris (Librairie orientaliste P. Geuthner) 1925.
- LIDDELL, H.G., SCOTT, R. & JONES, H.S. (eds.): a Greek-English Lexicon, Oxford (Clarendon Press) 1996.
- MASPERO, J. & DRIOTON, E.: «Fouilles exécutées a Baouit», MIFAO 59, 1932-1943.
- MEYER, M. & SMITH, R.: Ancient Christian Magic. Coptic Texts of Ritual Power, San Francisco (Harper SF) 1994.

- MEYER, M. & SMITH, R.: Ancient Christian Magic: Coptic Texts of Ritual Power, Princeton (Princeton University Press) 1999.
- **MIKHAIL,** M.S.: «Some Observations Concerning Edibles in Late Antique and Early Islamic Egypt», *Byzantion* 70/1, 2000, 105–112.
- MANAL, B.H.: «Bees and Beekeeping in Ancient Egypt (a Historical Study)», *Journal of Association of Arab Universities for Tourism and hospitality* 15, 2018, 1–16.
- NETZLEY, P.D.: The Greenhaven Encyclopedia of Ancient Egypt, New York (Greenhaven Press) 2003.
- DE LAGARDE, P.: Aegyptiaca, Göttingen (Arnold Hoyer) 1883.
- PARSON, P.: City of the Sharp-Nosed Fish. Greek Lives in Roman Egypt, London (Weidenfeld & Nicholson) 2007.
- PETERSEN, T.C.: A Collection of Papyri: Egyptian, Greek, Coptic, Arabic, New York (Kraus. Pinto) 1964.
- RANSOME, H.M.: The Sacred Bee in Ancient Times and Folklore, London (George Allen & Unwin) 1937.
- **RICHTER,** T.: «Borrowing into Coptic, the other Story Arabic Words in Coptic Texts», in *Lingua Agyptica, Studia Monographic*, 17, Hamburg (Widmaier.) 2017, 513-533.
- RÖMER, C. & THISSEN, H.J.: «Eine magische Anrufung in koptischer Sprache», ZPE 84, 1999, 175–181.
- **SAGRILLO,** T.L.: «Bees and Honey», In *the Oxford Encyclopedia of Ancient Egypt*, edited by REDFORD, B.D., 172–174, Oxford (Oxford University Press) 2001.
- SATZINGER, H. & SIJPESTEIJN, P.J.: «Zwei koptische Papyri aus der Papyrussammlung aus der Princeton University», *Enchoria* 16, 1988, 49–53.
- **SAWY,** M.: «Treatment by Medicine and Magic in Coptic Texts», PhD Thesis/George August University of Göttingen, 2022.
- SCHENKE, G.: «P.Köln XV 640. Anrufung der Sonne und all Ihrer Mächte in der Hoffnung auf Eine Gute Honigernte», Kölner Papyri (P.Köln) 15, Sonderreihe Papyrologica Coloniensia VII/15, 2017, 247–252.
- SHALABY, B.M.: «The Uses of Honey in Egypt in Greco-Roman Period», BCPS 39, 2022, 421-450.
- THOMAS, G.T.: «Religious Background for Virgil's Bee Symbol in the Georgics», Vergilius 24, 1978, 32–36.
- VAN DER VLIET, J.: «Cologne Coptic Magical Texts: Some Notes and Corrections», ZPE 122, 1998, 119–122.
- VORDERSTRASSE, T.: «Terms for Vessels in Arabic and Coptic Documentary Texts and Their Archaeological and Ethnographic Correlates», in *Documents and the History of the Early Islamic World*, edited by SCHUBERT, A.T. & SIJPESTEIJN, P.M., Leiden & Boston (Brill) 2014, 195–234.
- **ZELLMANN–ROHRER**, M.: «The Text and Traditional Context of the 'Hay Cookbook' and Associated Magical Texts on Leather», In *BEC4*: Proceedings of the 4<sup>th</sup> British Egyptology Congress, 7–9 September 2018, University of Manchester, 2018, edited by GRAVES, C., London (Egypt Exploration Society) 2020, 169–179.
- ZELLMANN-ROHRER, M.: «An Assemblage of Coptic Magical Texts on Leather and Their Traditional Context (P. Brit. Mus. Inv.№ EA 10122, 10376, 10391, 10434, 10414)», In *Proceedings of the 29th International Congress of Papyrology*, Lecce, 28 July–3 August 2019, edited by CAPASSO, M, DAVOLI, P. & PELLÉ, N., Centro di Studi Papirologici dell'Università del Salento, Lecee (Centro di Studi Papirologici dell'Università del Salento) 2022, 1049–1064.