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# The Antu-List Reconsidered: A Synoptic Reading of Edfu and Athribis Scented Material

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**Summary:** This paper examines parallel inscriptions found in the temples of Edfu and Athribis, which are believed to list various types of myrrh. Central to these inscriptions is the term *antu*, posited as a categorical descriptor for a group of resins. This paper presents a detailed, synoptic presentation and translation of the inscriptions from both Edfu and Athribis, accompanied by a critical review and analysis of its multiple layers of meaning, encompassing religious, cultic, symbolic, and linguistic dimensions. The investigation serves as a methodological framework for understanding how natural materials were conceptualized and classified in Egyptian textual and cultural contexts.

**Keywords:** Athribis (Upper Egypt) – Edfu – Laboratory – Myrrh – Ointment – Perfume

## 1 Introduction

The final peak of royal temple building and decoration that took place during the Ptolemaic period preserves a significant amount of textual material, and this material serves as a crucial record of knowledge at that time. The temple of Edfu, dedicated to Horus, is the best-preserved temple of the Ptolemaic Period and among the material it preserves is a corpus of texts, both ritual and ‘scientific’ (*Wissenstexte*), recording knowledge related to scented ointments and fumigations offered to the gods<sup>1</sup>.

1 A note on terminology. We use “ointment” or “scented ointment” for any prepared semi-solid or viscous material prepared with animal or

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According to the building inscription, a small room called the “laboratory” (*jz*) at the west side of the Edfu temple’s inner hypostyle hall was meant to store or prepare ointments for ritual purposes. The detailed writings that decorate its walls contain a wealth of information concerning scented materials, including their ingredients, processes and use. The texts themselves are embedded in ritual scenes showing the king worshipping deities and offering various kinds of natural and processed scented materials<sup>2</sup>. It may be that all temples, at least of the Ptolemaic-Roman Period, had such a “laboratory” room dedicated to ritually-significant ointments and incenses<sup>3</sup>; however, the “laboratory” of Edfu is unique due both to the number of recipes and instructions it preserves and to their embedding within scenes of worship and offerings. Fortunately, from another temple of the Ptolemaic Period, the temple of Reptyt in Athribis, some parallel texts are preserved. These parallels are close enough to suggest there was a common body of knowledge related to scented materials integrated into Late Period temple decoration.

According to the “laboratory” texts preserved in the Edfu and the Athribis temples, one of the most important materials for ritual purposes is called *nt.w* (*antu*). *Antu*, conventionally translated as “myrrh”<sup>4</sup>, is well-known from other texts and media of this and other periods. However, its presence in these two temples is especially prominent and unique. It appears in what has come to be called the

vegetable fats as a substrate and various other natural, scented materials. We do not intend anything more specific, and the term could be used interchangeably with “perfume” or “unguent”. We avoid the former because of the modern connotations it carries to alcohol based cosmetic products and the latter because it is somewhat archaic. The most important distinctions for us are natural (i.e., “raw”) vs. prepared materials, and of prepared materials, those that are prepared as ointments to be applied or as incense to be fumigated.

2 For ritual scenes related to the offering of aromatic products such as ointments and fumigation in Late Period temples: Wilde 2024 (/Habilitation submitted to Heidelberg University).

3 Cauville, Ali 2017, 57 ff.

4 See *nt.w* in TLA (<https://thesaurus-linguae-egyptiae.de/lemma/39010>, accessed on 31.10.2022); Wilson 1997, 162; Wb 1, 206.7–207.3; the identification with “myrrh” is stated by Steuer 1933. The most ancient attestation of the word is dated to the 4<sup>th</sup> Dynasty (see Wilde 2024, Habilitation submitted to Heidelberg University). On the plants understood as *antu*, see also Baum 1999, 421 ff.; Baum 1994, Germer 2008, 45, Serpico 2000, 438.

“Antu-list”: a list of fourteen entries, each called *antu*, preserved in near identical instances at Edfu and Athribis. In both versions, each entry in the list begins by introducing a material as *antu*, then giving its name (often otherwise unattested), followed by various descriptors including consistency, shape, colour, scent, source, divine associations, and other properties.

The identification and translation of *antu* has been problematic since the early days of Egyptology. In 1939, Ebbell provided the first translation and interpretation of the Antu-list, and he regarded *antu* as a collective term for aromatic substances in general<sup>5</sup>. He based his interpretation on the evidence of the Edfu inscriptions in the “laboratory” (E II, 205–207; E XI, Taf. CCCXCIV) as well as in the “Punt hall” in Athribis<sup>6</sup>, and he believed that the list entries should be taken to refer to varieties of resin organized into smaller groups. In his translation and notes, he offered botanical identifications for the entries based on comparisons with descriptions of resinous material by classical Greek and Latin authors like Pliny, Dioscorides, and Theophrastus<sup>7</sup>. He does not, however, consider botanical remains or archaeological data, nor does he fully consider the material from Athribis. Chermette and Goyon (1996) as well as Aufrère (2005) furthered the study of the Antu-list by translating and interpreting the lists from both Edfu and Athribis; however, their readings of the Athribis list followed Petrie’s edition of the texts, which are known to be problematic (Petrie 1908, Pl. XVII–XX). Thanks to the Athribis Project, a reconsidered and collated version of the hieroglyphic inscriptions gave a new basis for reading the Athribis-version of the Antu-list. This has been partly considered and translated in the most recent transcription and translation of the Edfu list by Leitz (2014a, 483–516), but, like Ebbell, he referred to the Athribis version only occasionally when the text in Edfu was unclear. Leitz published a new transcription and translation of the Athribis list in 2022<sup>8</sup> and it has led to many improvements in the text. However, for both the Edfu and Athribis Antu-lists, Leitz relies on lexicographic approaches for translating plant names<sup>9</sup>.

These previous studies of the Antu-list suggest *antu* in these contexts refers to a kind of unprocessed material derived from trees. However, recent archaeometrical studies have called this into question. Chemical analyses of residues from vessels used in funerary rites and labelled

“*antu*” seem to show that *antu* refers to a composite product produced from animal fats mixed with bitumen and varieties of plant resins<sup>10</sup>. The archaeometrical evidence raises challenges for the conventional translation of *antu* as myrrh. It also raises deeper questions about the nature of the Antu-list itself, the kinds of materials it preserves, and the use of the term in different contexts. The results of these studies not only fail to confirm any trace of compounds typically associated with myrrh (i.e., resinous exudates from trees of the *Commiphora* genus), they are inconsistent with the large variety of substances presented by the texts themselves. This might be because the archaeological remains come from funerary equipment, embalming workshops or embalming cachettes, while the text of the Antu-list explains material used only for temple service. Substances used for anointing statues in the temple cult have not yet been found or analysed.

To provide a basis for addressing such questions, this paper returns to the textual material of the Antu-list as two exemplars of a common ingredient list for the preparation of a special ointment. Our aim is not to identify these substances with modern botanical types. It should be kept in mind that the descriptions may be idealized, allegorical, and not straightforwardly botanical. Our aim instead is to elucidate the way the text presents its classification of materials used in ointment-making and what the Egyptians might have meant when they used the term *antu* for ritual purposes.

To do this, we present a new edition and translation based on the published material, including the recently-published new collation of the comparable text material from the temple of Athribis (introduced and described in the following sections). Thanks to collation work done by the authors *in situ* and with their own photographs from Edfu and Athribis, a synoptic reading of the Edfu and Athribis Antu-list is offered here. Identifications that have been proposed in earlier studies are critically examined using botanical data and experimental procedures.

## 2 The Edfu list

On the west wall in the first register of the “laboratory”, opposite the entrance, there is a ritual scene with the title *hmk jh.t t3-ntr n nb ntr=sn* – “Giving of the Things of the Land of god to lord, their god” (E II, 204–208). “Things of the Land of god” refers to various sorts of aromatic substances, which are already briefly introduced in the king’s speech,

5 Ebbell 1939, 89–111; for the identification of *antu* and *senetjer* in botanical terms see also Baum 1999, 421–443.

6 Leitz, Mendel, el-Bialy 2014, 243 ff., on the basis of Petrie 1908.

7 Ebbell 1939, 89–111.

8 Leitz 2022.

9 Wörterbuch der Ägyptischen Sprache 1955.

10 Rageot et al. 2023, 6; see also Fulcher, Budka 2020, Fulcher et al. 2021.

namely *antu* (*nt.w*) in alabaster vessels and *nenib* (*nnjb*), *hedjet* (*hd.t*) and *atef* (*ʒtf*) incense. The origin of these substances is also briefly pointed out, e.g., from the bodily parts of the gods.

After the speech of the king follows a list of substances introduced with a formula well-known to introduce the ritual spell: *dd-mdw* (Fig. 1). It is a list of aromata used for anointing the divine bodies (statuary) in the temple cult. It includes 14 varieties referred to as *antu*, three of which are explicitly excluded from use in the temple. Following the 14 varieties of *antu*, a second part of the list describes 14 varieties of aromatic woods (*nenib*). In this paper, only the first part of the list, describing varieties of *antu*, is examined. The second part of the list describing *nenib*, will be considered in a sequel. In the columns, the varieties are listed one after the other, with a space between the “entries” (Fig. 1) as attested in contemporary papyri<sup>11</sup>.

After the 14 varieties of *antu* and *nenib*, the text concludes: “As for these species of *antu* which have arisen from the divine limbs, and these varieties of *nenib* which have come out of the divine eyes, namely, from the eye of Ra, from the eye of Horus, and united from the eye of Osiris: a magnificent ointment is to be made from them for all the gods, being united with them into a single thing, to keep their limbs alive with the fragrance of the divine limbs”<sup>12</sup>.

This conclusion suggests that the list describes two groups of plant material, one headed with *antu*, the other with *nenib*, which are ingredients for a special ointment used in the temple cult. No distinctive name for this ointment is recorded.

### 3 The Athribis list

In the temple of Athribis, the parallel texts corresponding to a number of entries of the Edfu Antu-list are located in the so-called “Punt hall”<sup>13</sup>. Unlike at Edfu, these are not embedded in a ritual scene, but rather organized as a special soubassement inscription, together with iconographic representations of trees instead of the usual offering bearers. There are eight entries on the east wall (F 6, 1–8) and eight entries on the west wall (F 6, 14–21), of which the first (F 6, 14) contains only the tree and no inscription, while the last two fields are completely empty. Since the parallel in Edfu continuously transmits the text, it is likely that the list of trees on the east side of the Athribis “Punt hall” begins with

F 6, 1 and runs there to F 6, 8, then continues on the west side (from F 6, 15 to F 6, 19). One scene in the neighbouring room (F 5, 18) belongs exactly between the east and west walls but is located on the west wall of this room, dividing text and iconography with a doorway to another room. In the case of Athribis, no introduction, no purpose or conclusion of the text is given. The entries follow one after another, as expected in a soubassement text.

#### 1.


#### Edfu:



(1)<sup>14</sup> *dd-mdw nt.w šw tp(j) hpr m jr.t r' nh(.w) ntr.w m hnm.w*<sup>15</sup> *šwš rnʃ jwnʃ m nbw jwʃ m mn.(w)t*<sup>16</sup> *šʒ.wt twt swh.tʃr*<sup>17</sup> *swh.t n mn.t* (2) *n wr-s r-s* (E II, 205, 12–13)

To be recited: Dry *antu* of the first quality, which came into existence from the eye of Ra, from which scent the gods live. Its name is *aush*. Its colour is golden and it has many forms<sup>18</sup>. The appearance of its egg<sup>19</sup> is similar to the egg of a swallow<sup>20</sup> without being bigger than it.

<sup>14</sup> The numbering of columns is adapted to the arrangement of the texts. In Edfu, the columns are counted from the beginning of the Antu-list, appearing on the western wall of the “laboratory” (see Fig. 1). In the case of Athribis, the columns of each entry are counted separately, since they are part of the soubassement inscriptions and each of the entries is presented as an individual unit, accompanied by the vignette (image of a tree, see Fig. 2). The numbering of the individual sorts corresponds to the order in the structure of the inscriptions of the “laboratory” of Edfu.

<sup>15</sup> The sign  was used for *tp* (or its variant). Aufrère (2005, 254) transcribes *nh ntr.w jmʃ tp m ddʃ* and interprets *tp* with the pot-determinative as first quality oil and *ddʃ* as resin.

<sup>16</sup> Aufrère (2005, 254) transcribes *mn.t* and translates, “perle”.

<sup>17</sup> For use of *r* in comparative forms see Kurth 2008, 813.

<sup>18</sup> That is, there are many varieties. For the word *mn.t*, see Wb 2, 65.6–8, see also below *mn.t* for “swallow”: these two words might be also used as a pun. Chermette, Goyon (1996, 50) interpret *mn.t* as “gouttelettes”, “larmes”.

<sup>19</sup> Supposed to describe the material as lump or nugget.

<sup>20</sup> Leitz 2014a, 502, translating “Taube”, suggests it is a description of the size of the material, not its colour. However, the size of resin “tears” is contingent on harvesting practices and varies considerably. Translating “swallow” would be more beneficial from the perspective of describing outer appearance of a resin like *opoponax* (resin of *Commiphora guidotti* Chiov. ex Guid.) with an inhomogeneous structure and colour, often collected in lumps similar to the shape of bird eggs (in varying sizes) and speckled similar to swallow eggs. Therefore, a comparison with the egg of a swallow and translation for *mn.t* as swallow is more likely in this context, because the text is describing outer

<sup>11</sup> Cf. P. Louvre E 3452 und P. Carlsberg 230 (ref. of S. Braun).

<sup>12</sup> E II, 208, 6–8; Leitz 2014a, 511.

<sup>13</sup> Athribis I, 245–246, F 6.

**Athribis:**

Destroyed.

Name: *aush*.

Identifications previously proposed: Ebbell identifies *aus* as “the galbanum of antiquity” (“Das Galbanum des Altertums”<sup>21</sup>). The basis for the identification is a shared offering of *aus* and *nenib* in particular temple scenes. He argues that since the two are offered together, they likely come from the same place; since scholars commonly identify *nenib* as styrax (*Liquidambar orientalis* Mill.), which he believes to be a resin from Syria, he claims *aus* likely also comes from Syria; and since the only other resin mentioned by Greco-Roman authorities from Syria other than styrax is “galbanum” (χαλβάνη), Ebbell tentatively identifies *aus* with galbanum. He distinguishes this “ancient” galbanum from modern galbanum (*Ferula gummosa* Boiss.), whose native range is limited to Persia (limited in fact to a small region in Iran)<sup>22</sup>. This argument is not persuasive. First, there are numerous counterexamples to the suggestion that being presented together in an offering implies common geographical origin; second, *nenib* is not commonly identified with *Liquidambar orientalis* Mill., but *Styrax officinalis* L.<sup>23</sup>, whose native range extends well beyond Syria<sup>24</sup>. Other temple-texts mention foreign regions, e.g. Utenet, pointing to the South or South-East<sup>25</sup>.

Earlier attestations: none found.

Religious significance: Eye of Ra; the gods “live from” the scent of this substance.

Other comments: The reference to the *antu*'s "egg" appears in entries 1, 3 and 4. The meaning is not clear. It could refer to the size of the resin "tear", as Leitz (2014, 502) seems to take it. This is suggested by the fact that the egg is similar to a bird's egg "without being bigger than it" in Entry 1. However, "tear" size is known to vary with harvesting practices. It could also refer to the colour pattern that is comparable to swallow's eggs, also supporting the reading for swallow instead of dove.

appearance at first and more detailed. Chermette, Goyon 1996, 50 and Aufrère 2005, 254, are translating “hirondelle” as well.

**21** Ebbell 1939, 93.

22 On the genus *Ferula*, see: Majid, Venditti, Sarker, Nahar, Akbarzadeh 2019, 350–394.

<sup>23</sup> See Lühtrath 1999, 112–115, referring to Germer 1985, 147, but she classifies the identification of styrax as unsure. According to the TLA *nnjb* means *Styrax officinalis* L. (<https://thesaurus-linguae-aegyptiae.de/lemma/84920>); see also Wilson 1997, 524.

24 Fritsch 2001, 95–116.

<sup>25</sup> For suggestions regarding the localisation of Utenet see Gauthier GD I: 209; Wilson 1997, 279–280; Hornung 1977, II, 71; 120, ref. 190.

2.

**Edfu:**

(2) *nt.w šw g<sub>z</sub>-dbn rn-f hpr m jr.t wsjr nt.w m m<sub>3</sub>' pr(j)  
m jr.t j**b**(.t) jnm-f pw dšr (E II, 205,14)*

Dry *antu*<sup>26</sup>, whose name is *gardeben* and which came into being<sup>27</sup> in/from the eye of Osiris<sup>28</sup>. True *antu* coming from the left eye. Its colour is red.

**Athribis:**

Destroyed.

Name: *gar-deben*; Ebbell (1939, 94) reads the name as *gʷr-phr*, which is rejected by Goyon (1984, 78–79).

Identifications previously proposed: Ebbell (1939, 94) suggests myrrh; Goyon (1984, 78–86) suggests either a variety of myrrh, of *aus*, or styrax, as the element *m<sub>33</sub>* for a resin-producing tree, and relates this to nenib on the basis of earlier attestations for *m<sub>33</sub>*. Ebbell (1939, 94) argues that *m<sub>3</sub>* (understood as word for “true”) suggests that this is the paradigmatic or type-defining kind<sup>29</sup> of *antu*, and since *antu* means myrrh, then it follows that this is the only true myrrh on the list. Ebbell’s argument, however, assumes *antu* means myrrh, i.e., *Commiphora myrrha* (Nees) Engl., which is precisely what is at issue, and so this argument cannot settle the question of identification. One needs independent reasons for thinking *antu* is *Commiphora myrrha* (Nees) Engl. The fact that it is said to be dry and red in colour is not sufficient to establish this.

Earlier attestations: none found.

Religious significance: left eye, often connected with the moon and also Osiris<sup>30</sup>.

26 Leitz 2014a, 503 transcribes *ṛntw šw tpj* and translates, “Myrrhe erster Qualität”, but *tpj* is not written in the hieroglyphic inscription in Edfu.

27 Another option is to emend *hpr<f>* which would mark the beginning of a new sentence: “It came into being”, etc.

28 There is a space after the name of Osiris. It seems that the scribe or copyist interpreted the following part as the new entry/paragraph, probably because of the word “*antut*”, which starts a new sentence.

29 Wb 2, 13.13–14; see also TLA <https://thesaurus-linguae-aegyptiae.de/lemma/500218> (accessed on 30.1.2023); the word *m3'* in other texts describing materials distinguish “true” from “artificial”, e.g. gemstones like glass, see Wilde 2021, 16–17.

30 As an example, see Quack 2020, 67–76.

## 3.

## Edfu:



(2) *nt.w šw* (3) *gꜣr-nw rn=f nt.w n šm(.w) pr(.j) m jr.t r*  
*jwn=f m nbw mj;wš n wr swḥ.t f r f* (E II, 205, 15–16)

Dry *antu*, whose name is *garnu*. *Antu* of the *shemu*-season (summer), which came from the eye of Ra. Its colour is golden, similar to (the colour of) *aus*. Its egg<sup>31</sup> is not bigger than that<sup>32</sup>.

## Athribis:



(*x+1*) [...] *ḥt(?)* [...] (*x+2*) (Athribis I, 245)

This entry in Athribis is mostly destroyed, partly not carved. The sign *š* can be a part of the name, *aus*, since there seems to be a comparison with *aus* in the variant of Edfu.

Name: *gar-nu*.

Identifications previously proposed: Ebbell (1939, 95) identified this kind as frankincense on the basis of a parallel in Pliny concerning the time of harvest. The argument is not convincing: Pliny (*Naturalis Historia*, 12.60) gives two seasons for frankincense harvest, summer and winter; moreover, other resins may be harvested in summer as well.

Earlier attestations: none found.

Religious significance: Eye of Ra.

Other comments: The *shemu* season could refer to the time of harvest.

## 4.

## Edfu:



(3) *nt.w šw gꜣr-tꜣ rn=f* (4) *ḥd.w<sup>33</sup> pw jwn=f dšr wn tp(.j)*  
*m{š/h/} ḥr.j f sn.nw<sup>34</sup> m hr(.j) f pr=f m qs.w nw ḥ.w-ntr*  
*qrqr(?) swḥ.t f* (E II, 205, 16–206, 1)

Dry *antu*, whose name is *garta*. This is *hedju*. Its colour is red. The best is ‘on its top, the second (quality)’ is what is underneath it<sup>35</sup>. It comes from the bones of the divine body. Its egg is rounded(?)/(as/in) small pellets(?)<sup>36</sup>.

## Athribis:



(1) *nh.wt nt.w qꜣbtt/qꜣbtt<sup>37</sup> rn=f jwn=f [...] ḥd.w pw jr*  
*ḥd.w {h} tp<(.j)><sup>39</sup> (2) [...] hr.j [...] ḥd.w sn.nw f m {g} <hr(.j)> f*

<sup>33</sup> The common translation for *ḥd.w* is “aromatic resin” (e.g. Wilson 1997, 696) or “styrax resin” (WbDrog 387, Ebbell 1939, 96–97 suggested that *ḥd.w* is *Styrax officinalis* L., referring to chemical analysis of L. Reuter). We decided not to translate it and leave the word in Egyptian, since we consider it to be a category, describing substances with similar features, such as quality, state, properties etc.

<sup>34</sup> Leitz (2014, 503) transcribes *r(.j).w(.?) f*. Our transcription and translation are emended according to the Athribis version, the signs of the Edfu variant seem to be mistaken. For possibilities of reading □ see Kurth 2010, 345, but none of them seem to be convincing here.

<sup>35</sup> From the lower part (of a tree? if so, similarly as in the next text of Athribis?) Or from its (most) inner part? (also: could it stand for *m-h.t f*?)

<sup>36</sup> Not yet clarified/identified, comparing *qrqr.t* (<https://thesaurus-lin-guae-aegyptiae.de/lemma/857704>); Wilson 1997, 1087 f.; Chermette, Goyon 1996, 52 and Aufrère 2005, 254, also read *qrqr*, translating “arrondi”. Leitz 2014a, 503, reads *qrqr* “abweisend”. The word *krkr* can also mean lumps (Wb V, 136 and Wilson 1997, 1087–1088), “its egg is (in) lumps” might refer to many small pellets(?), but the orthography is strange.

<sup>37</sup> Also read by Leitz 2022, 516, he explains it as a writing mistake.

<sup>38</sup> The hieroglyphs are poorly preserved, one would expect the text continues with *dšr*. After that, Aufrère 2005, 254 emends *tp f ḥd.w pw*, translating, “sa principale production est constituée de (ses) résines aromatiques”.

<sup>39</sup> The restitution in the edition is unlikely because when writing it with one-consonantal signs, *hpr* is only written *h-p*, not *h-p-r*. Instead, the reading □ is suggested here and the text can be reconstructed with comparison to the Edfu version. Leitz 2022, 516 reads *hpr hr.j f*.

<sup>31</sup> Supposed to describe the material as lump or nugget.

<sup>32</sup> This material seems to have nuggets of the same size as *aus*.

*r* [...] *pr*<sup>40</sup> *m* [...] *p*(?) *r* *m* *qs.w* *nw* *h<sup>c</sup>.w-ntr* (3) *jr*[.tw] *k3(.w)t* *nb.w(t)* <*jm*><sup>41</sup> *f* *m* *r3.w-pr.w* [...] <sup>42</sup> (Athribis I, 246)

Trees of *antu* whose name is *aqbet/qabet*. Its colour is *r*[ed(?)]. This is a<sup>43</sup> *hedju*<sup>44</sup>. Regarding *hedju*: its ‘best quality’ is at its top; *hedju* of its second quality comes from its bottom [...] <sup>45</sup>. It comes from the bones of the divine body. It is use[d] for every kind of temple activity in all sanctuaries.

Name: *gar-ta* (Edfu); *aqbet/qabet* (Athribis).

One would expect that the names in both versions should correspond and be phonetically similar, as in the other cases. They could be pronounced somehow similarly or there might be mistake(s) of a scribe or copyist. Aufrère (2005, 254) transcribes *q3rt*, which would correspond to *g3r-t3*, but the sign looks more like the sign for *b* (see Fig. 3).

Identifications previously proposed: The sort of *antu* called *garta* was identified by Ebbel (1939, 96–97) as *Styrax officinalis* L.; by Goyon as *Liquidambar orientalis* Mill. (Goyon 1984, 78–86); and by Chermette, Goyon as *Olibanum* (Chermette, Goyon 1996, 53).

Earlier attestations: none found.

Religious significance: The instruction that it is to be used for every kind of temple activity is expressed generally, and it could be understood to be part of the common daily offerings, perhaps also for the statuary ritual. It derives and is compared with a substance from the bones of the divine limbs, but not related to a special deity. Although not explicitly stated, the connection between divine bones and material coming out of it might be meant to recall bone marrow. If the material described is in fact a resin, this would suggest bones are mentioned (perhaps symbolically) as a source of a liquid or soft material. Reference to the resin from the inner part of a tree might refer also to the inner part of the bodies of the gods.<sup>46</sup>

<sup>40</sup> Leitz 2022, 516 emending *f* on the basis of the Edfu record of the same part of text.

<sup>41</sup> There is a lacuna in the text and it seems that no signs were written there. The size of the lacuna fits well with the suggested emendation, it seems that the hieroglyphs were never carved (see Fig. 3).

<sup>42</sup> The *njw.t* follows according to Petrie. One could expect here some version of a common phrase “in sanctuaries of all towns of Upper and Lower Egypt”.

<sup>43</sup> Suggestion of J. F. Quack (2022, workshop discussions); Leitz 2022, 516 takes it as a general term “Das ist Hedju-Räucherwerk”.

<sup>44</sup> The sentences are switched, compared to Edfu.

<sup>45</sup> Leitz 2022, 516 translates, “Was das Hedju-Räucherwerk anbelangt: Es entsteht seine Oberfläche. Das Hedju-Räucherwerk, sein zweiter Bestandteil ist das, was unter ihr ist” (“regarding *hedju*, its surface is created/comes into existence. The *hedju*-incense, its second (part) in what is underneath it”).

<sup>46</sup> For the connection of bones and marrow, symbolic significance and procreation qualities of bones, see Nyord 2009, 305; 419.

5.

Edfu:



(4) *nt.w* *šw* *šm-r-ht-3-brtt* *rn-f* *hd.w* *pw* *jwn-f* *mrš* (5) *wnn-f* *gn* *m* *hnw-f* *tw* *jwn-f* <sup>47</sup> *r3-jtn* *m* *pr-t* *pr-f* *m* *hd.t* *n.t* *jr.t* *jtm(.w)*<sup>48</sup> *jn.tw-f* *m* *t3-ht* (E II 206,1–2)

Dry *antu* whose name is *shemerkhet-aabert(et)* (?)<sup>49</sup>. This is *hedju*. Its colour is reddish<sup>50</sup>, it is soft within. The appearance of its colour is similar to the sun disc in the *peret*-season (winter). It came out of the white of the eye of Atum. It is brought from the land of Khet.

Athribis:



(1) *nh.wt* *nt.w* *šm-r-ht* [...] *r3-jtn* (?)<sup>51</sup> *rn-f* *jwn-f* *mrš* *jm* *wj-ntr* <sup>52</sup> *h3.w* *pr* *m* *jm* *wj-ntr* *wnn-f* *gn* *m* *hnw-f*


<sup>47</sup> Again comparison, see note 17.

<sup>48</sup> For this writing of *jtm.w* see Mysliwiec 1979, 48 f.

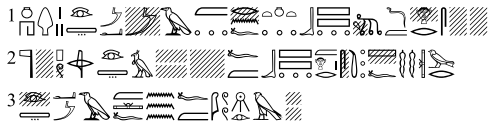
<sup>49</sup> Aufrère 2005, 254, reads and translates differently, similar to Chermette, Goyon 1996, 54: “L’antyou concrété, qui est adjoint à la dotation divine et dont le nom est aâouret, est une résine aromatique dont la couleur est ocre-jaune”. The final part of the composite, the word *br*, can mean “eyeball”, thus the name could possibly refer to Egyptian phrase such as “coming (*šm*) [something] eyeball (*br*)”, see <https://thesaurus-linguae-aegyptiae.de/lemma/56270>; Wb 1, 465.5; Wilson 1997, 321 f.; cf. E IV, 250, 8 (pl. XCIII): *dd-mdw* *nt.w* *šms.tw* *m* *šm* *r[š r ht (br) prj]* *jtm.w*. For the possible interpretation see the discussion of the name in the text below.

<sup>50</sup> Chermette, Goyon 1996, 54 und Leitz 2014a, 504 translate, “rötlich”, Aufrère 2005, 254 “jaune ocre”. According to Harris (1961, 146–147) that is supposed to be a red ochre. The word is probably related to Coptic *mrosh*, which means red or yellow (Crum 1929–39, 183).

<sup>51</sup> Leitz’s edition (Leitz, Mendel, el-Bialy 2014, 246; 2022, 516) reconstructs the sign (*jb*), that could have been derived from two attestations for *jbr* as writing variants in the Edfu “laboratory” (E II, 189,6 and E II, 190,2). The round sign could stand for *h* but it could be also a determinative.

<sup>52</sup> The transcription of Leitz, Mendel, el-Bialy 2014 and Petrie is different here. The  signs can stand for eyes (*jr.wj*), or, based on the look of the sign in hieratic, better for pupils of the eyes (*jm.wj*, *d.tj*). The style of carving the signs might be explained by the supposed source from papyri, in hieratic it is not common to write really “round” signs, as discussed with A. v. Lieven and J. F. Quack during the workshop in August 2022. Leitz reads the signs as *m3wtj* (rays). We prefer the reading of eyes/pupils of eyes for the reasons mentioned above, which also fits better into the context where divine eyes are often mentioned.



**Athribis:**

(1) *nḥ.wt nṯ.w m[ṣ]m [rn]f nṯ.w <pw> (?)<sup>68</sup> bšš jwnf {d}<sup>69</sup> m ḥrs[t...]* (2) *ntr.j<sup>70</sup> pw jr nṯ.w nḥ[d<sup>71</sup> ...]f m bšš m ḥr[s].t [stj]f<sup>73</sup> ndm wr (3) [n]t.w <pw><sup>74</sup> ṣm;mf mwšf m šw.w jr(.t) ḥr.w [pw]* (Athribis I, 247)

Trees of *antu* whose name is *mamam*. (The sort of) *antu* (?) whose colour is of *beshesh* like (that of) carneol. This is the (colour of) heart. As for *antu*, (called) *nehed*, its [colour(?)] is like *beshesh* and like carnelian. Its [smell] is very sweet. [(A sort of) *antu*] which swallows its liquid in the sunlight (rays?)/exposed to sunlight. [This is] the Eye of Horus.

Name: *mamam*. The name is spelled differently in each variant. Chermette, Goyon (1996, 57) read also *beshesh* as a part of name<sup>75</sup>. On the contrary, we consider it to be related to the description of the colour of the material, see note 56.

Identifications previously proposed: Ebbell and Germer suggest that *nḥd* (*nhd*) could be a gum resin: *gum ammoniac/ammoniacum*<sup>76</sup>. Another option, according to Germer, referring again back to WbDrog, is the resin of *Dorema ammoniacum* Dom., but she also mentions that it is unclear if it was known to the Egyptians. However, neither *Ferula tingitana* L. nor *Dorema ammoniacum* Dom. match the description in our


passage: in smell, they have a detectable concentration of ammonia and are considered pungent smelling, and in colour both are yellow-brown, although with some reddish colour<sup>77</sup>. Moreover, the identification based on the name is not sufficient, since it shares similarities to names of other resinous materials. For instance, it shows similarities to “Mamali,” the name of a myrrh-growing region in South Arabia, mentioned by Theophrastus in *Historia Plantarum* 9.4.2: “Frankincense, myrrh, casia, and also cinnamon are produced in the land of the Arabs at Saba, Hadramyta, Kitibaina and Mamali” (γίνεται μὲν οὖν ὁ λίβανος καὶ ἡ σμύρνα καὶ ἡ κασία καὶ ἔτι τὸ κινάμωμον ἐν τῇ τῶν Ἀράβων Χερρονήσῳ περὶ τε Σαβὰ καὶ Ἀδραμύτα καὶ Κιτίβαινα καὶ Μαμάλι). It is perhaps the same as the place on the Arabian peninsula mentioned in Ptolemy’s *Geographia* 6.7.6.4 as “Mamala” (Μάμαλα κώμη). In modern Somali, myrrh is called “molmol” or “malmal.” This resin, in contrast to *ammoniacum*, is red in colour and sweet-smelling. We ourselves are wary of etymological claims especially across languages, and we do not here endorse the identification of *mamam* with a resin from Mamali or with a modern molmol product. The etymological evidence, therefore, is ambiguous and cannot on its own determine the question of identification.

Earlier attestations: This kind of resin is attested already in the Saite-Persian tomb of Iufaa at Abusir among the list of substances connected with the mummification ritual (Landgráfová, Míčková 2021, 362). There is an older attestation on pEbers (for concrete examples see Germer 2008, 89).

Religious significance: Eye of Horus<sup>78</sup>.

<sup>68</sup> Leitz 2014a, 504, ref. 92, suggests a writing mistake for *nṯ.w* and in his translation 2022, 517, he just transcribes *tnt*, giving a comment in a footnote (ref. 94). It is missing in the Edfu-version. Chermette, Goyon 1996, 57 and Aufrère 2005, 255 also read *nṯ.w*. However, the mentioning of *antu* again in this context does not fit well. And to interpret the word as *tnt* (or its reading variant) does not solve the problem, thus we emend the text with *<pw> bšš jwnf* and start a new sentence here.

<sup>69</sup> *d/dm* probably a writing mistake *ṯwnf* {*d*} *m*.

<sup>70</sup> One would expect the sign  in the lacuna.

<sup>71</sup> The sign of a bird is not very clearly visible, but considering the variant of Edfu, it should be read as *nḥ(d)*.

<sup>72</sup> The signs are barely visible. Leitz 2022, 517, emending *rnf*, translates the sentence, “*nhd* ist ihr Name als *bšš* aus Karneol.” Comparing to Edfu, the sentence should describe a colour comparing it to some kind of material (*bšš*), and not name. We thus suggest emending the word as “colour”.

<sup>73</sup> According to our transcription, *s-tj* should be read twice: *ḥrs.t + stj*.

<sup>74</sup> Leitz has *antu* in brackets and Petrie’s transcription differs.

<sup>75</sup> Chermette, Goyon 1996, 57: “dont le nom est Memâmem ou Beshesh (oliban semi-liquide)”.

<sup>76</sup> Germer 2008, 89; WbDrog 314, note 47, probably *Ferula tingitana* L., see also Ebbell 1939, 100–101.

<sup>77</sup> See Mottaghipisheh, Vitalini, Pezzani, Marcello 2021, 350–394; Majid, Venditti, Sarker, Nahar, Akbarzadeh 2019, 945–989.

<sup>78</sup> For the broad range of symbolic significance connected with the Eye of Horus see Nyord 2009, 193–200, more special regarding offerings like unguents: loc. cit. 197.



7.

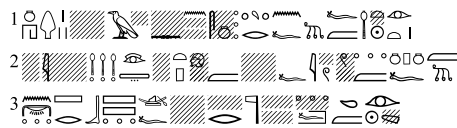
Edfu:



(6) *nt.w šw qy-dbn-rsf rn=f hđ.w pw nt.w hđ(.t)*<sup>79</sup> (7) *jwn=f m nb.w j{t}[w=f wgm]*<sup>80</sup> *m hnw=f bšš jm=f m hrs.t pr(j) m jr.t r*<sup>c</sup> (E II, 206,4–5)


Dry *antu*, whose name is *qydeben-resef*. This is *hedju*, the bright *antu*. Its colour is like gold. The *ugem* powder is inside it(?)<sup>81</sup>. The *beshesh* is inside of it, like carnelian<sup>82</sup>. It came out from the eye of Ra.

Athribis:



(1) *nh.wt [nt.w g(?)]z-[...][n...]*<sup>83</sup> *rn=f jwn=f m hđ.t*<sup>84</sup> *jr.t* (2) [...]<sup>85</sup> *j[...]* *hđ.w nt.w [...]* *tp m [...]*<sup>86</sup> *jw w[?]m*<sup>87</sup>

<sup>79</sup> Here colour or appearance, above “category” with grain-determinative.

<sup>80</sup> Leitz 2014a, 504 reads *wšm* although  (if so) can only be read as *gm*. However, the bird signs are not very well visible.

<sup>81</sup> Alternatively, as a verb: it stirs/mingles in its inside (?). The group of bird-signs is not very clear, each of them seems to be different, but the exact shape of the signs is not recognizable. If the *wgm* is interpreted as a verb, there are two possibilities of interpretation because the position of *t* in the Edfu variant is not clear: it could be also interpreted as the Late Egyptian *jw=tw* (*hr*) *wgm*. Leitz has *jw {tf}* *wšm*, without the second *f*/flesh sign.

<sup>82</sup> I.e. *bšš*-liquid of a red colour(?). Leitz translates, “Karneolfarbenes *bšš* ist in ihm”, Chermette, Goyon “c’est que l’oliban (a bruler) oushem se trouve a l’interieur de lui; l’oliban semi-liquide”, Aufrère “l’exsudat qui est en lui est (de couleur) cornaline”. It seems to be a substance similar to a mineral or a mineral that is compared for the colour, see also note 64.

<sup>83</sup> The hieroglyphs are severely damaged and the name of this entry of Athribis is thus questionable. Chermette, Goyon 1996, 59 and Aufrère 2005, 255 read *qydbn*. Considering the hieroglyphs published by Petrie, it could also be read *qšbtt*. The sign is clearly visible in Petrie’s (1908, pl. XVII) as well as in the edition of Athribis I by Leitz, Mendel, el-Bialy 2014 and it is also still visible on the wall. The signs reconstructed in lacunae in Leitz’s transcription are not well visible (anymore).

<sup>84</sup> The publication in Petrie reads *šym.t* instead of *hđ.t*, but this seems to be a mistake of transcription.

<sup>85</sup> No hieroglyphs are preserved, but Chermette, Goyon 1996, 59 and Aufrère 2005, 255 emend Osiris.

<sup>86</sup> Leitz 2022, 517 transcribes and translates differently, as follows: ... *jr.t [...]* *jr hđw nt.w [...]* *m hđ=f*; “das Auge... Was das Hedju-Räucherwerk anbelangt, [das ist] Myrrhe in seiner Helligkeit”.

<sup>87</sup> Possibly *wgm*: the lacuna is too small to be *š*, but sufficient for *g/q/k*, however, the signs are not easy to distinguish and the text is not very

*nprn(?)=f m jwn* (3) *n nbw šr*<sup>88</sup> *bšš jm=f [...]* *r ntr (?)*<sup>89</sup> *pr=f m jr(.t) r*<sup>c</sup> (Athribis I, 247)

Trees [(of) *antu*. ... *ga(?)*]<sup>90</sup> is its name. Its colour is like the white of the eye [...]<sup>91</sup> *hedju*, the best *antu* (is) in its [...]. Its *nepen*-grains/pellets(?) of the colour of gold *sher(?)* *beshesh* from/in it. [...] divine [...]. It came from the eye of Ra<sup>92</sup>.

Name: *qy-deben-resef*.

Identifications previously proposed: Ebell (1939, 96–97) identified this sort of *antu* as *Styrax officinalis* L., but more recently it is common to find *nnjb* and *gnn* identified as *styrax*<sup>93</sup>.

Earlier attestations: none found.

Religious significance: Eye of Ra.

Other comments: The reading of *wšm* in the Edfu-version (suggested by Leitz) does not correspond to the signs clearly visible on the wall. TLA translates *wšm* with “to stir”, “to mingle”<sup>94</sup>. Wilson (1997, 327) suggests mixed varieties of incense. This seems implausible. One would expect a preposition. There could be a scribal error: *wšm/wgm*, *wgm* for “powder”, “incense ground to powder”<sup>95</sup>. Neither Chermette, Goyon (1996), nor

clear. Leitz 2022, 517 is emending *wšm* and goes on with the text as follows: *jw wšm m hnw=f m jwn n nbw*: “wobei *wšm* in ihrem Innern ist in der Farbe von Gold...”

<sup>88</sup> While Leitz left these signs out and went on with *bšš*, they have been well visible on the wall for us. However, the text is hard to translate. Does the preposition say “underneath”? Are there described different looking parts of the material? If so, it might refer to an inhomogeneous resinous material as suggested by Chermette, Goyon and Aufrère 2005 (see below).

<sup>89</sup> According to the suggestion of Leitz (Leitz, Mendel, el-Bialy 2014, 247), the three signs before *pr* depict flesh, translating (Leitz 2022, 517): “karneolfarbenes *bšš* ist in ihm [...] Leib”.

<sup>90</sup> Leitz 2022, 517 reads just *gš-dbn*.

<sup>91</sup> Chermette, Goyon 1996, 59 and Aufrère 2005, 255 understand this phrase as part of the eyeball: Chermette, Goyon as white part of the eyeball, Aufrère as *sklera*. Leitz 2022, 517 translates it just as description of the colour: “Ihre Farbe ist weiß.”

<sup>92</sup> Chermette, Goyon 1996, 59 suggest for this entry: “...c’est l’oliban (a bruler) oushem qu’il a a l’interieur de lui, d’une coloration d’or, (mais) l’oliban semi-liquide en lui est de (la coloration de la) cornaline, sortant de l’oeil de Re.” Aufrère 2005, 255 translates, “C’est un *ântyou* résineux dans son aspect natif, étant à l’état liquide à l’intérieur avec la couleur de l’or, mais dont l’exsudat qui est en lui est (couleur) cornaline lorsqu’il émane de l’oeil de Ré”. Both translations do not take into account the *ntr*-sign. What seems to be clear is that the text describes resin in different states; it may be contrasting fresh material from the crystallized or solidified state when collected. The last sign of that entry does not look very round, although both Petrie and Leitz transcribe it as Ra. This would be comparable to Edfu and fit into the context.

<sup>93</sup> See commentary on entry 1 and note 23.

<sup>94</sup> <https://thesaurus-linguae-aegyptiae.de/lemma/50540> (accessed on 22.7.2023).

<sup>95</sup> Wilson 1997, 270.

Leitz (2014a) translate *wšm*, but Aufrère (2005, 255) translates it as “fluid”. Chermette, Goyon have collected some more references for *wšm*: in E III, 133 (9), it is mentioned as a variation of *senetjer*, and this again is categorized as *antu* on the flame (“divine scent coming to you, *ushem* incense and *imah* incense are presented before you, its *antu* resin (put) on the flame for you, which comes forth from Horus the Elder”). Dendera II, 35 (4): “The divine fragrance is for you, *ushem* and *imah* are presented before your face”; Dendera IV, 67: “... to your nostrils, the divine scent is for you, as *ushem* incense it is brought before your beautiful face”. These references are all clearly to be read as *wšm* with *š*-sign and the context suggests that *wšm* has to be understood as a state or a kind of resin used for fumigation, different from *wgm*. This is mentioned very rarely in ritual scenes. In one case it is mentioned in the Karnak Opet-Temple<sup>96</sup>, but the scene and a great amount of the text is destroyed. Another instance includes a scene connected with *antu* that is presented in an antu-vessel (*hbb.t*) and described as “dry *antu*”, similar to the entry in the list. Further attestations include the embalming ritual (*wgm n hrj*, “powder of myrrh”<sup>97</sup>) and a temple inscription in Edfu of modelling a brick for the foundation ritual with *menwer* incense and *ugem* mixed into the soil (E VII, 48, 5–9<sup>98</sup>).

## 8.

## Edfu:



(7) *nt.w šw mš<sup>c</sup>-jb<sup>99</sup> rn[f] nt.w nw qm3.tjt<sup>100</sup> pw pr<sup>f</sup> m t3*  
 (‘)3.t(?) *n.t [h]q.t<sup>101</sup>* (8) *jwn<sup>f</sup> dšr mjt.t<sup>f</sup> wnn<sup>f</sup> gn m mw<sup>f</sup> stj<sup>f</sup>*

<sup>96</sup> de Wit 1958, 67 and 1968, 31–32.

<sup>97</sup> Töpfer 2015, 151.

<sup>98</sup> Kurth 2004.

<sup>99</sup> Chermette, Goyon (1996, 61) and Aufrère (2005, 255) read only *mš<sup>c</sup>*. According to TLA (referring to Charpentier 1981, Nr. 567) *mš<sup>c</sup>* is an element of compounds that refers to myrrh: <https://thesaurus-linguae-aegyptiae.de/lemma/863645> (accessed 22.8.2023).

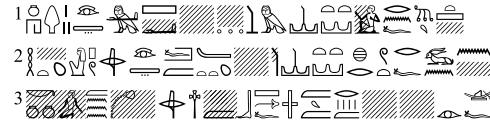
<sup>100</sup> Reading as *3m.t* might also be possible, for Kemati-land and Amu see below.

<sup>101</sup> Chermette, Goyon (1996, 62, note 32) and Aufrère (2005, 255) emending *t3ht* or *t3 n.t hnq.t* (beer-foam). Possibly also derived from 3/‘ “spittle” (Wb I, 169; Wilson 1997, 139) referring to “spit out liquid”, i.e., used as a noun – “outpouring of water”. Similar suggestion is made by von Lieven (2004, 164, note 25): “Sekret der Heket” (secretion of the frog-goddess). Leitz (2014a, 505) understands it as a writing or refer-

*ndm wr<sup>102</sup> jr nd-sn<sup>c</sup>.tw<sup>f</sup>103 m r<sup>f</sup>104 bš<sup>105</sup> m jm.j<sup>f</sup> r-4<sup>f</sup>* (E II, 206, 5–7)

Dry *antu*, [whose] name is *mesha-ib*. It is *antu* from *Kemati-land*<sup>106</sup>. It came forth as a fluid/spittle (?) of Heket. Its colour is red likewise. It is soft inside as/in its liquid. Its scent is very sweet. When it is pressed with/through a bag, then the internal semi-liquid is one quarter<sup>107</sup>.


## Athribis:



(1) *nh.wt nt.w mš<sup>c</sup>-jb(?) nt.w(?)*<sup>108</sup> *qm3.tjt rn<sup>f</sup> jwn<sup>f</sup>*  
*dš[r]*<sup>109</sup> (2) *<xxx(?)>*<sup>110</sup> *h[q].t pw<sup>111</sup> jr nt.w pr m bhd.t<sup>112</sup>[...?]*  
*qm3.tjt hr.tw r<sup>f</sup>113 wnn[f(3) gn] m mw[f<sup>114</sup> stj<sup>f</sup> ndm wr(?)*<sup>115</sup>

ence to *t3 sr.t 3.t*, “große Fürstin im Obeliskenschrein” (see also Leitz 2014b, 5–7).

<sup>102</sup> A blank space follows after *ndm wr*, starting a new paragraph, which could be a mistake as well as intention.

<sup>103</sup> For *nd*, containing the sign of a palette: Wilson (1997, 565) transcribes it as a composite, *nd-sn<sup>c</sup>*, “crush finely” and mentions one occurrence from E II, 203,9. In TLA the writing with *sn<sup>c</sup>* is mentioned as “fein zerreiben” with several examples. Perhaps  specifies somehow a broad meaning of the word *nd*.

<sup>104</sup> Chermette, Goyon (1996, 61) translate, “Si on le broie avec (ensuite) pression...” instead and interpret crushing the material.

<sup>105</sup> “Semi liquid”, or as a verb (to spit), or the like (*bš*); possibly referring to the out-pouring of liquid once the material is pressed, i.e. ¼ of its original content is “spat out”(?). Since it is connected directly with Heket, or with her spittle, it could be (at least more) liquid, compared to the others.

<sup>106</sup> Another option of reading is *3m.(t)*, see also note 100.

<sup>107</sup> Or “it spits from itself one quarter”.

<sup>108</sup> Supposed to be read as *nt.w*, see above.

<sup>109</sup> Aufrère continues: *ndm stj<sup>f</sup> r ntjw šm<sup>f</sup> m 3m.t hr-tw r<sup>f</sup>*.

<sup>110</sup> Here probably a word is missing. All other sorts of *antu* are identified with the bodily parts of the deities and not with them directly.

<sup>111</sup> Leitz (2022, 518) reads *hnw.t pw*: “Das ist die Herrin”.

<sup>112</sup> This is supposed to be an epithet or another form of Heket. The one of Behdet(?) (usually Isis or Hathor), or *hdd.t/htt.t* (Isis in scorpion form).

<sup>113</sup> Chermette, Goyon (1996, 63) translate this part: “sa coloration est rosée et ses parfums sont plus agréables (encore) que (celui) de l’oliban ordinaire – celui qui est venu d’ Amou – dit-on en ce qui le concerne”; similarly Aufrère (2005, 255): “Son odeur est plus agréable que l’ân-tyou – il vient d’Asie ainsi qu’on le dit à son sujet”. And Leitz 2022, 518 translates “Was die Myrrhe anbelangt, die aus Behedet herausgekommen ist: Herrin von Kemat sagt man dazu”.

<sup>114</sup> According to Edfu parallel and the same sentences in the other entries.

<sup>115</sup> Emended according to Edfu, the lacuna seems to be big enough for these signs (or their variants).

*jr nd[-sn-ʿ...m] bšf jm.jf r-4 m [...]*<sup>116</sup> *jr.j jm=f* (Athribis I, 253)

Trees of *antu*, whose name is *mesha[-ib, antu] kemati* the antu of Kemati-land is its name. Its colour is re[d.] It is <something/bodily part/bodily fluid of(?)> Heket. Regarding *antu*, which came forth from the one from Edfu, it is called Kemat(et). It is soft in its liquid. [Its scent is very sweet. (?)] When it is pressed [...], the internal semi-liquid is one quarter<sup>117</sup> [...] of what it contains.

Name: *mesha-ib*.

Identifications previously proposed: Ebbell (1939, 102–103) identifies *mesha-ib* as turpentine (resin of *Pistacia terebinthus* L. but also, he says, some coniferous trees) on the basis of the identification of Kemati-land with Western Asia, the presence of turpentine in burial contexts, and the opinion of a pharmacist that turpentine can be pressed to express a liquid. Steuer (1933, 41–42; 1943, 280–283) identifies it as a myrrh, i.e., the resin from *Commiphora myrrha* (Nees) Engl. var. *Molmol*, based on his identification of this resinous material with σμύρνα, “myrrh” in Theophrastus *De odoribus* 29 and Dioscorides *De materia medica* 1.60. His reason for the identification is that all three texts refer to the separation of a liquid fraction of the resin by means of pressure (in Greek texts, the resultant product is called στακτή, *stakte*, on which see Smrček, Rezek and Coughlin in preparation). Lucas (1937, 32) rejects Steuer’s hypothesis concerning the common process, suggesting instead that the process must have involved a fixed oil as solvent, but he makes no clear assertion about the identity of the resin. Experiments have successfully demonstrated that it is possible to separate a liquid fraction from fresh resin of *Commiphora myrrha* (Nees) Engl. by pressure without a fixed oil solvent, rendering Steuer’s original argument plausible. This process does not work on *Pistacia* or related resins. This description seems to point to the practice of pressing myrrh and might refer to this process known in Egypt in Hellenistic times. However, these results are awaiting peer review and further experiments would need to be done to exclude other resins, e.g., *Boswellia*, *Ferula*, etc. species.

<sup>116</sup> Leitz, Mendel, el-Bialy 2014, 253 emend Punt, but it is not visible on the wall at all (see Fig. 4). So Leitz (2022, 518) translates, “Wenn sie fein ausgepresst wird [in einem Beutel], so ist ihr Ausgepresstes, das in ihr ist, ein Viertel von dem in Punt, was in ihm war”. This emendation could come from a very common phrase, appearing in ritual scenes as reward from the gods: “I give you all Punt and what it contains/what is in it.” However, emending this phrase does not fit in the context here.  
<sup>117</sup> Or “it spits from itself one quarter”.

Earlier attestations: Earlier attestations are from the Middle Kingdom onwards, related to the oil offering list in coffin iconography<sup>118</sup>.

Religious significance: Heket. The suggestion of reading *t3-šr.t* (according to Leitz, see also notes 101) refers to a local deity of Edfu. In Edfu *t3-sr.t* is connected with one of the relics of Osiris (leg), otherwise with libation offerings and the Nile flood. If read as “Heket”, according to our suggestion (together with von Lieven 2004, see again note 101), no emendation is necessary. Moreover, referring to a more common deity for explaining or describing resinous material for the cult in general instead of a reference to a local deity seems more probable; furthermore, the Antu-list does not seem to have been composed especially for Edfu and it seems to refer to earlier archived material.

Other comments: Kemati land or Resin-land<sup>119</sup> seems to be an incense-producing region, also associated with gum-resin in the western Asian region. Chermette, Goyon (1996, 61) and Aufrère (2005, 255) read ʿ*m.t* instead, this might also be possible and might point more clearly to the western Asian region. It could stand also for a poetic name of Punt<sup>120</sup>, Gauthier connects ʿ*m.w* with Sinai (GDG I, 133) and *qm3.tjt* with Africa (GDG V, 174).

## 9.

### Edfu:



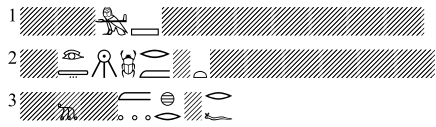
(8) *nt.w šw qy-dbn jr.j-s3.wj* (9) *mf mš-ʿ-ib pw hpr-f m t3/ʿt3.t sr.t/sms.t ʿ3.t wnn-f gn m mw-f km m jwn-f wkm hr.tw r-f* (E II, 206, 7–9)

Dry *antu*, whose name is *qydeben iri-saui*. It is *mesha-ib*. It came into existence from/in the Great princess/spit/fluid(?) of the Great princess/the Great eldest one. It is soft in its liquid part and black in its outward colour. It is (also) called *ugem*.

<sup>118</sup> Baum 1999, 439, note 78; see also Allen 1996, 10; Jéquier 1921, 145, Abb. 397; 18. Dynasty: Urk. IV 501, 13 (inscription in a tomb of a treasurer during the reign of Hatshepsut).

<sup>119</sup> For suggestions for locations see Wb 5, 38.5; Gauthier GDG V, 174 and Kockelmann 2015, 242, ref. 644 (for people).

<sup>120</sup> Wilson 1997, 1058 after Gauthier, for Punt see also Kockelmann 2015, 44–45.

**Athribis:**

(1) [nh.wt 'nt.w ...] mš'[-jb(?)...(2)...] 'nt.w šw hpr m [...] t<sup>121</sup> [...] (3)...jwn-f(?)<sup>122</sup> ...] m hr[.tw]r-f (Athribis I, 253)

[Trees of *antu* ...] *mesha[-ib(?)...]* dry *antu*, which came into existence in/from/as [...] its colour...]. It is called [*ugem(?)*<sup>123</sup>].

Name: *qy-deben iri-sau;* *mesha[-ib(?)*

Identifications previously proposed: pitch of wood<sup>124</sup>.

The identification of Ebbell does not seem very likely. Pitch does not seem to be very suitable for ointment making: it might be sticky and, otherwise, it seems to be related to preservation of non-living bodies (mummies/statuary). However, there are other words that are identified as pitch or pitch-like, e. g. *mnnn*<sup>125</sup> is translated as pitch/bitumen and is mentioned as ingredient of sacred oils.

Earlier attestations: none found.

Religious significance: the great goddess/the Eldest one.

Other comments: The mention of *ugem* is repeated, see commentary to entry 7, as well as *mesha-ib* in the entry before and a female deity as source for the material. It seems to be a variation of the material described before with another colour and alternative names. Unfortunately, the Athribis inscription is badly preserved and full of gaps, but refers to the same terms, *mš'-jb* and *wgm (ugem)* as well.

<sup>121</sup> A lot of text is lost, but Leitz (2022, 518) is emending *tj srt ?t* for the lacuna according to the Edfu text. Here, he refers to “the Great princess” according to his work on “Gaumonografien” (Leitz 2014b, 5–9), but in 2014a, he uses this reference for the deity in entry 8 for the Edfu version.

<sup>122</sup> Leitz 2022 is emending and reading *km m jwn-f*: “und schwarz in ihrer Farbe”, probably according to the Edfu version, but does not comment on it.

<sup>123</sup> Emended after Edfu. Ebbell (1939, 104) reads *wḥm*.

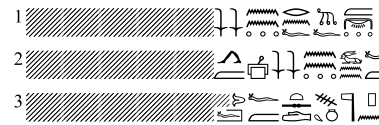
<sup>124</sup> Ebbell 1939, 103–105.

<sup>125</sup> <https://thesaurus-linguae-aegyptiae.de/lemma/70810> (accessed 19.2.2023).

**10.****Edfu:**

(9) 'nt.w šw jn-h3-s' snn<sup>126</sup> [rn-f] (10) jwn-f m nbw wnn-f gn m mw-f nfr wr<sup>127</sup> pr-f m psd n ntr pn (E II, 206,9–10)

Dry *antu*, [whose name is] *inhasaa-senen*. Its colour is like gold. It is soft in its liquid, (it is) very good (perfect). It came forth from the spine of this god<sup>128</sup>.

**Athribis:**


(1) [nh.wt 'nt.w jn-h3-s3(?)s]nn rn-f jwn-f m nbw (2) [...] m s3-nn wnn-f m (3) [...] wr pr-f m psd<sup>130</sup> n ntr pn (Athribis I, 253)



[Trees of *antu*. ...(?)] *inhasaa-se(?)nen(?)*<sup>131</sup> is its name. Its colour is golden. [...] *sasenen*<sup>132</sup>. It is [...]. Very [good(?)]. It came forth from the spine of this god.

<sup>126</sup> Perhaps *snn* is a word of its own. It occurs as well in the next entry, probably otherwise translated as “mineral”: <https://thesaurus-linguae-aegyptiae.de/lemma/137600> (accessed 19.10.2023). The word *jn-h3s* can also mean “leaves (of lotus buds)”, see Wb I, 99.16, but the connection is questionable, as is probably the identification.

<sup>127</sup> Leitz (2014a, 505) translates the sentence as, “Sie ist weich in ihrer Flüssigkeit (= dem austretenden Harz), wobei sie überaus vollkommen ist”. Kockelmann (2015, 200–201) translates, “Die Myrrhe *jn-h3s*: Ihr Name ist *snn*. Ihre Farbe ist Gold. Sie wird weich in ihrem Wasser, (sie ist) sehr gut. Sie kommt aus dem Rücken des Gottes”. A. von Lieven suggests it might be a papyrus note included into the inscription (discussion during our workshop in August 2022).

<sup>128</sup> No deity is mentioned here in contrast to the other entries, but according to von Lieven (2004, 164, note 24) *ntr pn* refers to Osiris.

<sup>129</sup> Sign  is visible, but is probably a determinative of a previous, unpreserved, word.

<sup>130</sup> The sign  was mistaken with .

<sup>131</sup> This emendation seems probable, because in all cases, except for the tree in scene 4, the names are same in Edfu and Athribis. Which also suggests that the name should correspond also in the 4<sup>th</sup> entry and difference is caused just by different orthography, or by mistake of a scribe or copyist, see also comment on that entry. Maybe [nh.wt 'nt.w jn-h3-s3; s]nn rn-f is all that was in the lacuna, corresponding to the Edfu version of this text. For *snn* in this text and the entry before and below, see note 126 and <https://thesaurus-linguae-aegyptiae.de/lemma/137600> (accessed 19.10.23).

<sup>132</sup> That could be the name/state of *snn* or *s3-nn*, appearing above and in the next entry. However, it is not known what preceded it, thus we leave the part without translation.



as the divine “heart” in the vulva of the Female Falcon, after sadness<sup>147</sup> [...] in it (i.e. heart). It is like a resin of the dry *antu*, (when) its liquid is dried(?)<sup>148</sup> from it. This *antu*: two chickens<sup>149</sup> of the *Benu* bird are found inside it, as an image<sup>150</sup> of this god, because he came out from it as its mingled limbs (?)<sup>151</sup>. You see this *antu* red, while the material inside is all bright and soft<sup>152</sup>. Its name is *ahem*. When the liquid is dried out from it, you find ... in the sunlight/dried<sup>153</sup>.

Name: *ahem*.


Identifications previously proposed: benzoe (Ebbell 1939, 106–107); benzoin (Charpentier 1981, 106–7); *Commiphora africana* (A.Rich.) Endl. (bdellium) or balm of Gilead/Mecca balsam of *Commiphora opobalsamum* = *C. gileadensis* (L.) C.Ch. (Loret 1887: 163)

Earlier attestations: The material called *ḥm* is attested already in the New Kingdom, among other resinous materials mentioned in Hatshepsut’s expedition (Urk IV, 329, 8). It occurs also on the restorations decree of Tutankhamun in Karnak (Murnane 1995, 212 ff.). In the Ramesside Period this substance is mentioned as an ingredient of an unguent in the Leiden Hymn to Amun (p.Leiden I, 350, I, 8; see Zandee 1947, 4), here it is cooked from the limbs of the gods. It is attested also in the Saite-Persian period, in the tomb of Iufaa at Abusir<sup>154</sup>.

Religious significance: The text is very obscure and hard to understand. There seems to be a complex associative web of creational accounts merging them simultaneously within the whole text: there is the verb *qm* “create” (if to be understood in the sense of “making” the pellets, but could have more connotations), there is the chick (𐩔) sign – i.e. something, that comes from the egg (which then follows). The text then continues speaking about a red substance, that could be compared with the blood (as metaphor for the red-


coloured droplets of resin?) of the female kite coming from her vulva, so the question can be raised, if there is a reference to the female biological menstrual cycle and in how far this might be connected with the *ḥm-jb* (i.e. suffering in the land of Punt?). Whatever the case may be, in this text, the substance is related to a female goddess, but not directly from limbs or eyes, instead, there is a possible relation to blood, giving birth and the heart<sup>155</sup>. The crucial metaphorical twist is the merging of the human biology with bird imagery: the *Benu* bird occurs more clearly in the Athribis version that might lead to a reconstruction to a *Benu* bird in the Edfu-text, otherwise it could have been an interpretation evolving from a misunderstanding of the Edfu-text by later Egyptian text editors or scribes.

In the Edfu “laboratory” the list ends with a total of 11 sorts of *antu*, explaining for what they are used and introducing others, that are not suitable for the products used in the temple cult:

12   
(12) *dmd nh.wt nt.w II* (E II, 206, 12–13)  
Total of Antu-trees: 11<sup>156</sup>.

(12) *nt.w šw tp.j pr(j) m ḥ.w-ntr jr.tw k3.t jm=sn m-gs pr.w nb(.w) nw šm.w mh.w*<sup>157</sup> (E II, 206, 12–13)

Dry *antu* of the first class, which came out from the divine bodies and which is implemented for the work to be done (i.e., ritual purposes) in all the temples in Upper and Lower Egypt.

12   
(12) *ky.t [...] n jr.tw k3.t jm=sn m pr.w-ntr.w* (E II, 206, 13–14)

Other [...] not to be implemented for work in the temples.

147 Leitz 2022, 507 translates, “Schwäche”.

148 Leitz 2022, 507 suggests, “zähflüssig” as a guess (see loc. cit. ref. 61).

149 Or two eggs, as twins of Geb. Leitz 2022, 507 suggests “und die Form von Kügelchen hat”, referring to his translation of the Edfu version (Leitz 2014a, 506), this sentence is translated by us differently (see above).

150 Here clearly image, according to the determinative.

151 Leitz 2014a, 506, ref. 102 and Leitz 2022, 507 translates, “Der Ba des Phönix ist in ihr in der Gestalt dieses Gottes, denn er ist aus ihr herausgekommen aus der Vermischung seiner Glieder”. But this is not less cryptic than the Edfu-Version.

152 Leitz 2022, 507 translates, “wenn sie weich ist”.

153 Leitz 2022, 507 translates, “Was jedoch den trockenen Zustand anbelangt: eine Flüssigkeit (das Harz) ist auf ihr und die Flüssigkeit ist wegen ihr rot, wenn sie trocknet”, taking the 𐩔 for *dšr* (red).

154 Landgráfová, Míčková 2021, 363.

155 For the procreation qualities of the heart see Nyord 2009, 420 f.

156 Interestingly, here is a mention of “*antu* trees” in the Edfu text, while in the text the trees are mentioned only in Athribis.

157 Leitz (2014a, 506), has left out this sentence.

12.

Edfu:

(12) *ʿnt.w šw yzḥ/zḥ* (13) *rnḥf jwnḥf km nḥt dḥd pw n jr.t st*<sup>158</sup>

(E II, 206, 14)

Dry *antu*, whose name is *yah/ah*. Its colour is of deep black<sup>159</sup>, it is the iris of the pupil of the eye of Seth.

Name: *yah/ah*. The name and its writing could possibly refer to an animal sound. There is also the name of Seth, *hy*<sup>160</sup>, referring to him in form of a donkey. The word could be its variant, but a phonetic writing for a foreign word is also possible, comparing the other special words for the ingredients above.

Identifications previously proposed: none found.

Earlier attestations: none found.

Religious significance: eye of Seth.

13.

Edfu:



(13) *ʿnt.w šw mšḥ-r3.w/mšḥ-r3-zw rnḥf jn-h3-sḥ pw mšḥ-m-r3-ḥt*<sup>161</sup> *ḥr.tw rḥf wnnḥf m qrqr.w*<sup>162</sup> (14) *š3.w jwnḥf dšr tp pw n jr.t st ʿnt.w nḥs pw jr.tw jmḥf r dr mr {k}<nb> m ph.wj* (E II, 206, 14–16)

Dry *antu*, whose name is *mesha-rau*. This is (a kind of?) *inhasaa*. It is called *mesha-mrachet*. It contains a great number of globules (?). Its colour is red, it is the upper part

of the eye of Seth. This is *antu* of poor quality, used to eliminate any ailment in the anus.

Name: *mesha-rau*.

Identifications previously proposed: none found.

Earlier attestations: none found.

Religious significance: eye of Seth.

Other comments: a use in medicine is mentioned in this entry; no corroborating source has been found.

14.

Edfu:



(14) *ʿnt.w šw ʿzy-jnd/ʿzynd rnḥf jwnḥf ḥd nḥt*<sup>163</sup> *wnnḥf mj rbf(?)* [...] (15) *jr nd-snḥ.twḥf ḥr mwḥf wnnḥf mj š3y* (E II, 207, 1–2)

Dry *antu*, whose name is *ay-inedj*, its colour is intense (?) bright/white, like ...(?)<sup>164</sup>. When it is ground firmly to its liquid, it is like sand.

Name: *ay-inedj*.

Identifications previously proposed: none found.

Earlier attestations: none found.

Religious significance: not mentioned.

(15) *dmḍ 3**dmḍ 14*

Total 3 (of additional *antu* sorts).

Total 14 (of *antu* sorts).

This list is then continued with two variants of resins from Kush, which are referred to as *antu* of inferior quality, before a new chapter opens with sorts of aromatic wood that are again of importance for ointments for ritual purposes (E II, 207, 5–208,6). These will be addressed in a sequel to this paper.

<sup>158</sup> According to A. von Lieven, the does not have to be read as š, but as a determinative for Seth in his negative manifestation (personal communication).

<sup>159</sup> Leitz (2014a, 506) translates, “Ihre Farbe ist schwarz, wobei sie fest ist”.

<sup>160</sup> Wilson 1997, 601.

<sup>161</sup> It seems to be another name for the substance, but Chermette, Goyon (1996, 65) translate, “qui ne peu pas être adjoind à la dotation (du dieu)” and Aufrère (2005, 256) “...qui n’est pas destiné à la dotation divine, dit-on à son propos...”, interpreting this as a descriptive name for the product and its purpose with *r3* as preposition that is not possible.

<sup>162</sup> Chermette, Goyon (1996, 65), translate, “en granulés multiples”, Aufrère (2005, 256) as crushed into small pieces (“concassé en menus morceaux”), Leitz (2014a, 507), does not translate this word at all, perhaps because it does not fit to his suggestion to translate *qrqr* as “repellant” in the 4th entry (see Leitz 2014a, 503). See 4th entry above.

<sup>163</sup> We read *nḥt* as related to *ḥd*, together with Chermette, Goyon (1996, 66) and Aufrère (2005, 256), whereas Leitz (2014, 507), understands it as a description of the material as “hard”.

<sup>164</sup> An unknown word (for discussion see Chermette, Goyon 1996, 66, note 46) and Aufrère (2005, 256), who translates, “Il est semblable à des granules”. Leitz (2014a, 507) does not translate this word and does not make any suggestion.

## 4 Concluding remarks

The descriptions most naturally suggest the materials in question are tree exudates, likely scented resins. The term *antu* however does not straightforwardly refer to a product from a single botanical type as terms like “myrrh” or “frankincense” do in English. Rather, it is a term for a class of scented materials used in the production of ointments. This is clear from the perspective of the list always beginning with *antu*, then continuing with a more specific name and description of the substances, as well as from the perspective of the type and title of ritual scenes: *šms ʿnt.w* (preparing/presenting *antu* or *jr(.t) sntr* (fumigating), but in the related formula other names of substances might occur. The relation of the list to the recipes and ritual scenes will be dealt with in another current work (Wilde, *in prep.*). A paper discussing the second part of the list, considering the scented wood material, is in preparation by the authors.

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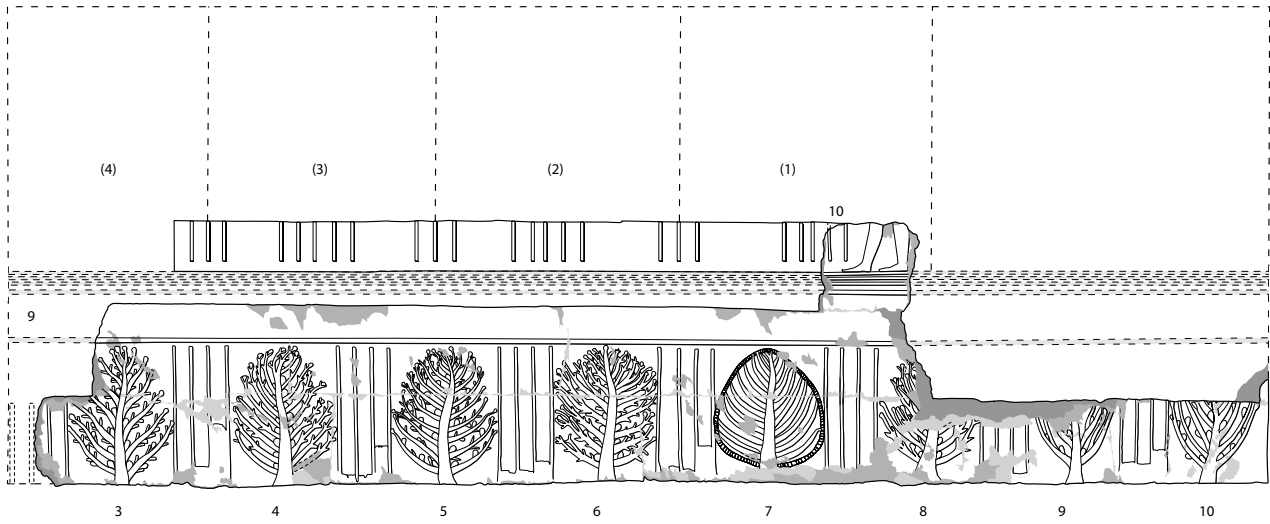


**Figure 1:** Antu-list embedded in the ritual scene in the Edfu “laboratory”. (Photo: Alchemies of Scent team ©Institute of Philosophy of the Czech Academy of Sciences).



Athribis-Tempel  
Die Puntkammer (Raum F 6)  
Ostwand

Zeichnung: I. Böhme



**Figure 2:** Antu tree list in Athribis: East Wall (drawing: Isa Böhme).



**Figure 3:** Athribis inscription of the 4<sup>th</sup> entry of *antu*  
(Photo: Alchemies of Scent team ©Institute of Philosophy of the Czech Academy of Sciences).



**Figure 4:** Athribis inscription of the 8<sup>th</sup> entry of *antu* (Photo: Alchemies of Scent team ©Institute of Philosophy of the Czech Academy of Sciences).