Aegyptus et Pannonia VII.

Acta Symposii anno 2021

BUDAPEST

Aegyptus et Pannonia VII.

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Editor: Hedvig Győry

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Contents

Plants and Health Conference 2021, and the Proceedings

Dr. Hedvig Győry PhD

HEFT AEC president

In 2021, the HEFS Ancient Egyptian Committee, in partnership with the HNM Semmelweis Museum of Medical History, organised an international conference entitled "*Plants and Health from Ancient Egypt to the Present Day*". The three-day conference focused on topics related to the application of plant material in medicine, but also included other topics connected to the use of plants in any practical or theoretical area of human life. We planned four sections with the following keywords:

History of healing and nutrition from the time of ancient Egypt to the present day
Which plants were used for healing, how, where, by whom and when, which plants were used to maintain health, or prevent disease in different parts of the world; what did people eat in everyday life, what were the festive foods/drinks, what were the expected results; and what are the related issues raised by ethnographic research.

Medicines and pharmaceutical science in historical periods in the light of sources
Who, how and why recorded knowledge of medicine in each period; what principles were used to treat patients or maintain health; what were/are the popular explanations of these issues or principles.

Herbal medicine and contemporary medicine
According to our current knowledge, what can we assess about the active ingredients of a given plant, the mechanism of action and its intensity, and what biochemical relationships can be discerned from their interactions.

Religious views and beliefs about plants
By whom, where, when, and what special magical properties have been attributed to plants, what is the role of plants in the social context, how is it explained, and how have plants been incorporated into everyday life/celebrations or healing practices

The conference was held between 14 and 16 October 2021 with 40 presentations. Due to the COVID pandemic, circumstances did not allow for a face-to-face meeting, so the event was entirely online. However, the possibilities offered by the Internet also allowed for smaller group discussions. The topics presented included the appearance and use of plants in different times and places, from ancient Egypt to contemporary Europe. They were divided into thematic and language (English and Hungarian) sessions, led by recognised scholars. After the lectures, it was possible to discuss the issues raised in front of the general public, and topics of narrower interest could be further discussed in separate rooms created within the Zoom system. Valuable contacts were made and new research ideas were generated. A small exhibition was also organised by the HNM Semmelweis Museum of Medical History for the occasion, as we had hoped until the last minute that the pandemic situation would change. However, it was only available to personal visitors.

During the conference it was possible to learn about new methods, we exchanged ideas and heard about research results and ongoing projects. A significant part of the presentations were given in English, the other part in Hungarian, but the papers included in the proceedings are all in English. The first part of the proceedings, as a result of the presentations and discussions, is published in this volume; the other part can be read in the next volume of the Aegyptus et Pannonia series.

Although not all the presentations are published, most of the aspects we covered are included in the volumes. The programme covered a wider range of topics: We were able to learn about plant finds from recent Egyptian archaeological excavations, the identification and use of plants in textual sources, religious connotations, and even the possibility of reconstructing perfumes. We could also look at the trade in plants between the Hittite Empire and Egypt, and learn which plants were used by the Copts in the Middle Ages. The latest research on Roman herbaria was discussed, and hitherto unknown ancient Egyptian texts were presented. Other presentations were devoted to the reproduction of some medicines based on ancient recipes. In one of the lectures we saw on video the process of preparation and examination of an ancient Egyptian medicine. Several papers dealt with temporal and spatial changes in the everyday and liturgical use and interpretation of a given plant, e.g. pomegranate in Greece. In India, Soma. In Hungary, thorn apple. In Estonia, pelargonium. In Finland and the Arctic, roseroot. And in the Arabian desert of Egypt, the apple of Sodom. The role of plants in religious ceremonies and concepts was also discussed, as well as the variety and significance of the scent they produce.

The lectures presented a wide range of the application of herbs in ancient and medieval medical methodology, with the help of Egyptian, Greek, Anatolian, and Hungarian herbariums. The conference participants were the first to hear that many ancient Egyptian medicines can still be found in the medieval Welsh medicinal knowledge. We also learned that a significant part of Dioscorides' usage of herbs could also be observed in Anatolian folk medicine. Lectures were given on the wide range of magical effects attributed to plants, spanning from antiquity to the Renaissance, in terms of iatromagic, iatromathematics, and iatromythology.

In separate sections, the participants were introduced to Hungarian ethnobotanical research, where, in addition to the methods of the way of collecting ethnobotanical data throughout Transylvania, the lecturers presented both the botanical aspects and the therapeutic potential of the plants included in the various Hungarian medicinal herbariums and pharmacopeias. In addition to the knowledge of plants preserved in the Hungarian witch-trial documents of the 15th to 19th centuries, the possibilities of historical and folk use against various diseases – such as tuberculosis and cholera – were also presented, and in connection with diabetes and surgery we also visited India and China. We got again an idea of how wound care has changed over the centuries, how plants have influenced the toolkit of surgeons, and which plants are still used in modern wound management. In connection with the Székesfehérvár Pharmacy Museum, an overview of the museum's extensive educational activities was presented in addition to its history. We have got acquanted also with the the most important medical tariff book of Hungary in the 18th century and the drawer labels of five apothecary furniture of the same period.

The approach to the flora of ancient Egypt is also diverse, and the study of the Ancient Near Eastern relations encompasses several scientific fields, such as Assyriology, Hittiteology and Biblical studies. The classical Greco-Roman world is also included in the next volume to facilitate comparison. In addition to history, interdisciplinarity also extends to other branches of the humanities, such as – among others – archaeology, history, linguistics, ethnography, philology, the history of religion and magic or iatromathematics.

In recent decades, the development of the sciences has moved in the direction of interdisciplinary cooperation, not only between related sciences, but also between seemingly distant branches of science. In addition to textual and material sources, the results and methods of the natural sciences are of fundamental importance for a more precise understanding of the past. The role of analyses and investigation of the various materials is thus becoming increasingly important, complementing traditional descriptive studies. As we also wanted to play a role in this process, several areas of natural science, such as archaeobotany, phytogenetics, types of data investigation and plant breeding, or various facets of medicine and medical history are also represented in the proceedings.

In this volume, we publish 11 studies that approach the world of plants from different perspectives within the broad framework of the conference. The focus is on ancient Egypt, but the articles also look at other areas. In addition to the data found in the articles and the results obtained, the methodological and theoretical approaches raise many new ideas, give exciting results and draw attention to various possibilities. For example, the multifaceted role of medicinal plants in the museum world or their application from the perspective of medical history and ethnomedicine.

With this volume, we hope to arouse interest in the unique world of the past, especially Egypt, to bring closer the world of nature and its possible effects on human life, and to encourage the birth of further results that will make the ancient Egyptian world better known and our own world better understood.

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We are also indebted to the participants, who raised the standard of the conference with their high-quality work, and especially the contributors to the proceedings, whose work is published in the volumes, as well as to the session chairs, PhD, Dr habil Tamás Bács, Dóra Czégény, Dr. Szabolcs Dobson Ph.D., Prof. Dr. Judit Forrai DsC, Prof. Ergün Lafli, Krisztina Scheffer, Paula Veiga, Venice Ibrahim Attia, Assoc. Prof. Hana Vymazalová PhD.

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Plants for Health: Vegetal Medicaments between Egypt and Ḫatti[1]

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Abstract

It is already known, mainly thanks to Elmar Edel's studies, that after the battle of Kadesh and during the later so-called *Pax Hethitica* period, the Hittite court asked the pharaoh several times for medical assistance. Many letters exchanged between the Egyptian and the Hittite courts mention the dispatch from Egypt to Ḫatti of physicians appointed to heal Hittite people, mainly for eye diseases and, once, for a case of sterility. This paper further investigates this topic, specifically trying to pinpoint some clues for a possible exchange of healing plants between these two countries. To fulfil this goal, I will briefly summarise all the attestations of plants allegedly sent from Ḫatti to Egypt, from the 18th to the 19th dynasty, exploring texts of different genres: the Annals of Thutmose III, the El-Amarna letters (mentioning a plant called *nikiptu*), the later Egyptian-Hittite correspondence, until a love poem from Deir el-Medina quoting a "*blossom from Ḫatti*".

Keywords: Egypt, Ḫatti, medicine, vegetal medicaments, *nikiptu*-plant

1. Introduction

The present contribution offers some clues hinting to a possible exchange of plants, used for medical purposes, between Egypt and Ḫatti. First, I will present some data coming from textual sources of the 18th and 19th dynasties (namely, the Annals of Thutmose III, the El-Amarna letters, the Egyptian-Hittite correspondence, and a love song attested on a portion of a

1 Many topics discussed in this paper come from the research I have conducted for my PhD dissertation: see De Pietri 2019. I heartfully acknowledge the anonymous reviewer of the first version of the present paper for his/her remarkable and very helpful suggestions and remarks.

vessel, made up of three ostraca, from Deir el-Medina) reporting exchanges of plants between these two countries; then, I will focus on one specific El-Amarna letter mentioning a plant sent by the Hittite king Šuppiluliuma I to Akhenaten, a possible example of a plant imported from Ḫatti and used in the medical sphere; last, I will offer some preliminary conclusions.

2. New Kingdom Sources

2.1. The Annals of Thutmose III

Starting from sources, and specifically the Annals of Thutmose III engraved on the walls of the 6th pylon of the temple of Amun at Karnak, we can analyse a passage,[2] referring to the pharaoh's 10th Asiatic campaign in his 35th regnal year (1444 BC),[3] which reports a tribute coming from an Asiatic land whose name, unfortunately in lacuna, has been hypothetically integrated as Ḫatti (*Ḫtỉ*), the Hittite land, or possibly as the countries of Aššuwa or Išuwa (integrated as *Jzy* in the Egyptian source),[4] respectively located in Western and Eastern Anatolia and under the Hittite control at that time.[5] The passage, listing the tribute coming from this foreign land, also includes some "*good plants (or even flowers/leaves)*", *ḫỉ.w* in Egyptian;[6] comparing this passage with later sources, we could speculate about an identification of these plants as ingredients used for medical purposes, even if no specific clues can support, *apertis verbis*, this interpretation. Notwithstanding, this could be the very first source which mentions the sending of plants from Ḫatti to Egypt (of course if we accept the aforementioned integration). Anyhow, it is noteworthy the mention of the dispatching of plants in the reign of this pharaoh who created the first Egyptian "botanical garden" at Karnak.

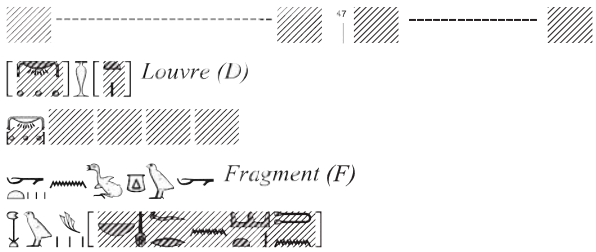
2 Urk. IV. 713, 13-16: „*Tribute anderer asiatischer Länder*". The hieroglyphic text, its transliteration, and translation are offered at the end of this section.

3 Egyptian chronology following Hornung et alii 2006.

4 Urk. IV. 713: „*Was erhalten ist, könnte zu*  *oder*  *gehört haben*". This integration has been suggested, as a hypothesis, basically on comparison with other topographical lists of the same king, displaying a similar structure in listing toponyms. On the interpretation of the toponym *Jzy*, see Breyer 2010a, 129-130 (with previous literature); cf. also Breyer 2010b, 77-78; Redford 2003, 82-83.

5 See e.g. Klengel 1999, 84, Karte 4. For a discussion on the location of Aššuwa, see Alparslan 2002, 29-31; for that of Išuwa, see Hawkins 1998, 281-282.

6 Wb. 3, 219.1-2: „*Blatt (mit Stängel und Rhizom)*".



[…] [47] […]	[…] [47] […]
[*nbw*] *ḥ*[*s.t*]	[gold], w[ater jar]
nb[*w*] […]	gold […]
ḫtw n ḇgw	*ḇgw*-timbers
ḫ3w [*nb nfr n ḫ3s.t t̲n*][7]	[any good] plants/flowers [of this foreign land].

2.2. The El-Amarna Letters

In the El-Amarna dossier, we find the first sure attestation of a plant sent from Ḫatti to Egypt, specifically in EA 41, a letter dispatched by Šuppiluliuma I to Ḫuriya (i.e., Amenhotep IV) to restart friendly relationships after the enthronement of the new pharaoh (who has interrupted them): thus, we can allegedly date this letter to the first years of the reign of Akhenaten (1353-1336 BC). The letter reports, in the end, some gifts exchanged between the two sovereigns, including (l. 43) "*two large medicinal shrubs*" (in Akkadian, *2 nikiptū rabûti*) sent by the Hittite king to the pharaoh: we will be back to this letter later (**§**3), focusing on the interpretation and possible identification of this plant. Here the text:

'39) *a-nu-um-ma a-na* ***šul-ma-ni-ka*** 1 *bi-ib-ru*
40) KÙ.BABBAR UDU.‹A›.LUM 5 *ma-na* KI.LÁ.BÉ 1 *bi-ib-ru*
41) KÙ.BABBAR UDU.SIR$_4$ \ *pu-u-ḫi-lu* 3 *ma-na* KI.LÁ.BÉ
42) 2 [***k***]***à-ak-kà-ru*** KÙ.BABBAR 10 *ma-na* KI.LÁ.BÉ-*ma*
43) 2 GIŠ*ni-kip-tu*$_4$ *ra-a-bu-tì ul-te-bíl-ak-ku*

(39-43) "*Now, for your greeting gift, one silver rhyton, a ram, five minas in weight, one silver rhyton, a breed ram, three minas in weight, two [ta]lents of silver, ten minas in weight, two large medicinal shrubs, have I sent to you*".'[8]

7 Transliteration and English translation are mine; cf. Blumenthal et alii 1984, 213: „*[Gold]: ḫs.t-Gefäß Gold: […] Stämme vom ḇgw-Holz (Eiche, Ulme?) [allerlei gute] Pflanzen [dieses Landes]*".

8 Schniedewind – Cochavy-Rainey 2015, vol. 1, 358-361 (translation by the editors of the volume).

2.3. Egyptian-Hittite Correspondence

In the Ramesside correspondence with the Hittite court, we find only plants sent from Egypt to Ḫatti, specifically for medical purposes, as e.g. in two letters (KBo 28.4 = ÄHK no. 46 and KUB 3.63 = ÄHK no. 51)[9] sent by Ramses II (1279-1213 BC) to Puduḫepa, wife of Ḫattušili III, both reporting the dispatch, throughout the hands of Egyptian physicians, of some Ú.MEŠ (the Sumerogram for "*plants/grass*" = Akkadian *šammū*),[10] i.e. plants to prepare medicaments for an ocular disease affecting Kurunt(iy)a, king of the land of Tarḫuntašša. In another letter sent by Ramses II to Ḫattušili III (NBC 3934 = ÄHK no. 22),[11] we read the Akkadian term *šamma*, equivalent to the already seen Sumerogram Ú, "*plant*", brought to Ḫatti directly by some Egyptian physicians (Sumerian A.ZU.MEŠ = Akkadian ^{LÚ}*asû*),[12] openly mentioned in ll. 8' and 18'. Elmar Edel (in his study on medical relationships between Egypt and Ḫatti)[13] suggested that the Akkadian term *šamma* could be the equivalent of the Egyptian *pḥr.t*,[14] "*medicament*", possibly etymologically connected to the Egyptian term for "*herb, (part of) a plant*", i.e. *sm.w/sm.yt*.[15]

2.4. The oCairo CGC 25218 + oDeM 1266

The last information in the Egyptian sources about a plant related to Ḫatti is attested on a vessel, made up of three different ostraca, found at Deir el-Medina, during the 1949-1951 excavation season.[16] According to the

9 ÄHK, vol. 1, 116-123 (no. 46 = E13); 134-137 (no. 51 = E18). Further information in HPM-K.

10 For the Sumerian term, see the *Electronic Pennsylvania Sumerian Dictionary*, Word ID: o0040756, <http://oracc.org/epsd2/o0040756> (accessed: 19th November 2021); cf. Attinger 2021, 1072-1073; for the Akkadian term, see CAD 17 (Š1), 315-321.

11 ÄHK, vol. 1, 52-57 (no. 22 = D3). Further information in HPM-K.

12 For the Sumerian term, see the *Electronic Pennsylvania Sumerian Dictionary*, Word ID: o0024736, <http://oracc.org/epsd2/o0024736> (accessed: 19th November 2021); cf. Pomponio – Visicato 1994, 32; Attinger 2021, 120; for the Akkadian term, see CAD 1 (A2), 344-347.

13 Edel 1976, 77-78: „Der Plural *šammi*^{MEŠ} bezeichnet die Einzeldrogen, während der (auch sonst für die Ägypterbriefe) einmalige Singular *šamma* das „*Heilmittel*" für die Augen in seiner Gesamtheit bezeichnet. Das damit übersetzte ägyptische Wort ist nicht etwa *smw* „*Kraut*", *smjt* „*Kräuter*", das in den medizinischen Texten nur eine verschwindend geringe Rolle spielt, sondern *pḥr.t* „*Heilmittel*", das gleichfalls sowohl die einzelne Droge wie das gesamte Heilmittel (Drogengemisch) bezeichnet". On the same page (Edel 1976, 78), the scholar also advanced an interesting equation between the Egyptian expression *jr.t pḥr.t* and the Akkadian syntagma *epēšu šammi*, both meaning "*to prepare* (lit. *to make) a medicament*"; the latter can be also found in some letters of the ÄHK along with some earlier El-Amarna letters (see De Pietri – Urzì 2021).

14 Wb. 1, 549.1-12: „*Heilmittel*".

15 Wb. 4, 119.11-120.3: „*Kraut, Futterkraut, Gemüse*"; Wb. 4, 120.4-5: „*Kräuter*".

16 According to Posener 1952, 42, the sherds were found in the "Grand Puits" of Deir el-Medina.

palaeography, they could be dated at the beginning of the 19th dynasty. The sherds belong to the neck of a vessel carrying a hieratic text in palimpsest: the *scriptio superior* is a passage of a love song, while the *scriptio inferior* reports a portion of the "*Teaching for Merikare*". A passage of the love song no. 21, mentions (at ll. 23-24, unfortunately in lacuna) "something" of Ḫatti which is cooked or burnt:[17]

'(*22*) […] *ḥnr n=j snt=j m mnt mj wꜣḏwꜣḏ mꜣḥ* …
(*23*) *jsy šwy pꜣ kꜣṯꜣ prḫw mjrbb ḥnw / pꜣ ḫsbd nꜣ rrm.wt pr … rw n Ḫtꜣ / pfs pꜣ bsbs pr*[*ḥ*]
(*24*) … [*nꜣ*] *wꜣḏwꜣḏ tꜣ tjr … jw=s m-dj=j m mnt mj wꜣḏwꜣḏ mꜣḥ ḥrwrw nb rwḏ ḥr pꜣ.t … mj ḳꜣj.s*

XII. (The boy speaks) "*If only my sister were mine every day, like wadjwadj-flowers in a wreath, ... (23) and dried reeds. The safflower blossoms, the mjrbb-flowers are (in) a bundle. The lapis-lazuli plant and the rrm.t-fruit (trees) spring up, . . . from Hatti are cooked (?); the besbes-plant blossoms, ... (24) the wadjwadj-plants and the willow tree [bloom]. She would be with me every day, like wadjwadj-plants (in) a wreath, all the blossoms which flourish on the meadow, … entirely*."'[18]

Possible integrations advanced for this lacunose passage include the word [*ḥrw*]*rw*, "*blossom*" (Michael Fox),[19] or [*ḥr*]*r:w*(*t*), "*flowers*" (Bernard Mathieu followed by Pascal Vernus);[20] in any case, if the integration is right, we would have here the mention of a blossom or flowers coming from Ḫatti (the composition deals with some flowers mentioned in a poetic context as metaphor of a lover compared to exotic plants). The word [*ḥrw*]*rw* is a Late-Egyptian syllabic writing,[21] connected to the Old and Middle Egyptian term  *ḥrr:t*,[22]

17 Hieroglyphic text from MATHIEU 1996, pl. 20; pictures of the vessel can be found in DARESSY 1901, pls 43-45.

18 Transliteration and English translation from FOX 1980, 102, 104. I report here the hieroglyphic text of the relevant passage at ll. 23b-24 only, put between / /.

19 FOX 1980, 109, fn. 48.

20 MATHIEU 1996, 110, fn. 378: „[*nꜣ ḥr*]*r:w*(*t*) *n*(*.t*) *Ḫtꜣ* {*p*}*fs=y*"; cf. 101: „*[les … les fleurs] de Hatti épanouies*"; VERNUS 1992, 91: „*les fleurs du* Kheta *parvenues à maturité*".

21 LESKO 1982-1990, vol. 1, 328.

22 Wb. 3, 149.8-18: „*Blume, Blüte*"; cf. GARDINER 1936, 197.

"*flower*", a word which, according to Hannig,[23] is interestingly quite close to the Hittite word *alil-/alel-*,[24] which also means "*blossom*", and has been also linked to the Akkadian word *ayaru*(*m*),[25] "*rosette*", and possibly to the Latin word *līlium* (*Lilium* L.),[26] coming from the Greek λείριον,[27] possibly a loan word from the Coptic ^{S}ⲍⲢⲎⲢⲈ/^{F}ⲍⲗⲏⲗⲓ,[28] stemming from the Demotic term  *ḥrry*(*.t*),[29] "*blossom/flower*"; from the Latin word, the current Italian word *giglio* and the English term *lily* are derived. Interestingly, Alfred Ernout and Antoine Meillet interpreted the Greek term as coming from a language of Eastern Mediterranean substratum,[30] while William Albright found the origin of the Egyptian term  *ḥrr:w* = /ḥa-ru-ru/, "*flower*" (a variant form of the Old and Middle Egyptian *ḥrr:t*), in the Canaanite word **ḫarûru*, meaning "*flower*" (possibly a white flower, maybe the *lily*, since the term literally denotes "*something bright*").[31]

Anyhow, there are some significant differences to be taken into account when comparing the Egyptian and the Hittite terms: e.g., the Egyptian initial consonant cluster (*ḥr-*) has no equivalent in Hittite (*al-*), unless we consider a possible apheresis; this cluster could instead be better explained by Albright's suggestion of a possible origin from a Canaanite term (see *supra*). Whatever the original meaning is, it is noteworthy that many scholars have speculated about a possible common etymological origin of both the Egyptian and Hittite terms from a language of substratum pre-dating the historical first attestations

23 Hannig 2015[6], 598 [no. 21676].

24 HED 1, 32-33 (supporting Hannig's interpretation); HEG 1, 16-17; HH 14; HW[2] 1, 58-59; Kronasser 1966, vol. 1, 324.

25 CAD 1 (A1), 229-230.

26 TLLO: *līlium*, *-ī* n.,Fine modulo *Thesaurus Linguae Latinae Online*, vol. 7, 2, 1398-1400. Berlin, New York: de Gruyter, 1975, <https://tll.degruyter.com/article/7_2_9_lilium_v2007> (accessed: 19th November 2021); cf. Ernout – Meillet 1951[3], 638; Walde – Hofmann 1938, vol. 2, 801.

27 Chantraine 1974, 629; Frisk 1960-1972, vol. 2, 100-101; Liddell – Scott – Jones 1996[9], 1036.

28 Lemma no. C6808 (ⲍⲢⲎⲢⲈ) in *Coptic Dictionary Online*, ed. by the Koptische/Coptic Electronic Language and Literature International Alliance (KELLIA), <https://coptic-dictionary.org/entry.cgi?tla=C6808> (accessed: 19th November 2021); Crum 1929-1939, 704a; Černý 1976, 294; Westendorf 1977, 388; cf. also Holton Pierce 1971, 105, refusing a Coptic origin for the Greek term.

29 Erichsen 1954, 326; cf. also the same lemma, with further discussion and references, on CDD, Ḥ, 239, online at: <https://oi.uchicago.edu/sites/oi.uchicago.edu/files/uploads/shared/docs/CDD_H2.pdf#239> (accessed: 19th November 2021).

30 Ernout – Meillet 1951[3], 638: „*līlium* […]. Semble provenir, comme le gr. λείριον, d'une langue méditerranéenne."

31 Albright 1934, 50, n. 14.

of the two Hamito-Semitic and Indo-European words;[32] unfortunately, we do not have any further clue to support this idea, and phonologically the hypothesis of linking the Egyptian term to the Hittite word for "*flower*" is untenable. Anyhow, it is notable the presence, in a text of the beginning of the 19th dynasty, of a sentence which seems to connect a kind of flower (maybe a lily) to the Hittite land.

A final question remains: how did the Egyptians come to know this kind of (evidently) peculiar "Hittite" flower? Some suggestions are reported in the comment to the aforementioned passage made by Mathieu: "On est tenté de situer l'apparition du genre amoureux au début de la XIXe dynastie, plus précisément sous le regne de Séthy Ier, dont on sait par ailleurs qu'il fut littérairement fécond, avec un renouveau sous Ramsès III […]. Si le personnage de Méhy est bien l'officier de Séthy Ier […], le cycle de CBC aurait donc été composé vers 1290-1280. D'autre part, la mention de *fleurs du Hatti*, dans O. DM 1266, 23 […], laisse à penser que la rédaction des deux cycles du Vase de Deir al-Medina est postérieure à l'an 21 de Ramsès II (vers 1259), date du traité égypto-hittite, et qu'elle a peut-être été suscitée par le texte du Premier Mariage hittite, en l'an 34, vers 1246."[33] The author considers the mention of the "*flower of Ḫatti*" as later to the "First Marriage" (1246 BC), event probably inspiring this composition (see e.g. the description of the enchantment that hit the pharaoh in seeing his bride;[34] cf. also the later account on the so-called "Bakhtan/Bentresh Stela"[35]). It is possible to think that the Hittite princess was followed by a great dowry, which included some vegetal elements, such as flowers, that reached the Egyptian land, and maybe also the royal harem at Gurob, even if no archaeological evidence has been retrieved there.[36]

About the very etymology of the word *ḥrr.t*, unfortunately we do not have, thus far, enough clues to express a deeper and convincing analysis, but it seems that a possible origin from the Hittite *alil-/alel-* is to be discarded; anyhow, it is noteworthy the quotation of a specific kind of flower, defined as "Hittite", in a period when many important events have happened between the Egyptian and the Hittite courts. It is also peculiar to underline that the Hittites are not attested only on official documents (such as those of the battle of Kadesh) but also in a very different literary genre, like the love poetry. This is a clue that the memory of the Hittites was perceived also in a less formal and propagandistic way. The use of the syntagma "*Hittite blossom*" in this text,

32 See Breyer 2010a, 388-392; cf. also Schrijver 2017, 362.

33 Mathieu 1996, 248, n. 857.

34 Hieroglyphic text in K*RI* II, 233-256, §66; English translation in K*RITA* II, 86-96.

35 Hieroglyphic text in K*RI* II, 284-286; English translation in K*RITA* II, 113-116; cf. also Lichtheim 1980, 90. On this topic, see recently De Pietri 2022.

36 Petrie 1890; cf. Petrie 1891.

in which the beloved is compared to many exotic flowers or plants, includes some aspects of the Hittite culture in an alluring sphere of "exoticism" (to some extents, a literary counterpart to the aforementioned "botanical garden" of Thutmose III). Finally, if the word attested in our source is actually the lily, a flower which is not indigenous in Egypt, we could even think about a possible importation of this flower from Anatolia to Egypt.

3. A Possible Interpretation for the *nikiptu*-plant

Reaching our last step, regarding possible plants imported from Ḫatti to Egypt and specifically used for medical purposes, I would like to come back to the aforementioned letter EA 41 **(§2.2)** and to the interpretation of the *nikiptu*-plant.

The Akkadian term *nikiptu* is regarded as a plant,[37] also called "*the plant of Ninurta*",[38] from which an "*excellent oil*" was obtained;[39] the plant was used in Assyrian medical recipes for fumigations and is also attested in mantic sources describing dreams. The Assyrian texts also describe two varieties of this plant: the male and the female *nikiptu*, the former described as compact and red, the latter as thin and yellow. The plant is also mentioned on a Hittite medical school tablet (KUB 37.1 = CTH 808) listing medical ingredients, and was firstly interpreted as the *Euphorbia antiquorum* L.[40] Federico Giusfredi noticed how the term is also attested on a tablet from Sippar and stressed that Martin Worthington has tentatively translated the word as "*spurge, Euphorbia*".[41] Thus, the *nikiptu*-plant could be the *Euphorbia antiquorum* L. which has yellow flowers and could be equated to the "*female nikiptu*" of the Assyrian medical

37 Liverani 1999, 411, n. 14: „*È una pianta oleosa, di impiego medicinale*".

38 CAD 11 (N2), 222.

39 For the use of this plant, and mostly of the oil obtained from it, to treat eye diseases, see Markham – Panayotov 2020, 69, 182, 200.

40 Köcher 1952, 48, 50: Vs. 7: „KIMIN ^{šem} ^{d}*ninurta* ^{ú}*ur*-[*n*]*u-ú* ^{ú}*a-z*[*u*]*-pí-ru ta-ḫaš-šal ina* KAŠ. SAG *tù-šab-š*[*al*] *(omissis); Vs. 10:* ^{giš}*dap-ra-a-na* ^{giš}NUMUN *kà-na-ak-ti* $^{giš\ šem}$*as-sà* $^{giš\ šem}$AŠ ^{giš}*ni-qib-ta* (*omissis*)*; Vs. 7: Desgl. Euphorbia antiquorum, Mi[n]ze, Safran zerstampfst du, koch[st] du in erstklassigem Bier (omissis); Vs. 10: Wacholder, Weichrauchsamen, Myrthe, Asa foetida, Euphorbia antiquorum*". Cf. Giusfredi 2012, 50, 52: „Obv. 7: KI.MIN ŠIM ^{d}*Ninurta* ^{ú}*ur-*^{r}*nu*^{1}*-ú* ^{ú}*a-*^{r}*zu*^{1}*-pí-ru ta-ḫaš-šal ina* KAŠ.SAG *tù-šab-š*[*al*] *(omissis); Obv. 10:* ^{GIŠ}*dap-ra-a-na* ^{GIŠ}NUMUN *kà-na-ak-ti* $^{GIŠ.ŠIM}$*as-sa* $^{GIŠ.ŠIM}$*ni-qib-ta (omissis);* Obv. 7*:* (*For) the same (symptoms): you pound nikiptu-plant, urnû-plant (and) saffron (and) you bo[il] them in (a container of) beer (omissis); Obv. 10: juniper, kanaktu-seed, myrtle, asa foetida (?), nikiptu-plant*".

41 Giusfredi 2012, 55: „*The nikiptu-plant (syllabically written at obv. 10), also called Ninurta-plant, is now attested in a medical text from Sippar*". Idem, fn. 6: „*For an edition of the text see Heessel/Al-Rawi (2003: 221-239); the new text provides no further clues on the nature and function of the plant; Worthington (2006: 44) translates tentatively 'spurge, Euphorbia?'*".

sources. Nevertheless, another good alternative candidate for this "*female nikiptu*" could be the *Euphorbia cyparissias* L., which also has yellow flowers but is also thin, a feature which better fits the Assyrian description.[42] A further analysis of the text from Sippar (where the *nikiptu*-plant is listed in a recipe about the treatment of swelling)[43] leads us to another possible interpretation of the plant (advanced by René Labat in the translation and comment of tablet Louvre AO 11447 = *KAR* 202) as the *Liquidambar* and more specifically the *Liquidambar orientalis* M., which has red leaves, and could be equated to the Assyrian "male *nikiptu*".[44] Reginald Thompson described the medical and ritual uses of the *nikiptu*-plant,[45] and firstly interpreted it as the *Liquidambar orientalis* M.,[46] which is red, a colour which retained an important symbolic meaning in rituals against demons where the performer had to wear a red garment; anyhow, he later changed his mind and supported an interpretation with the *Euphorbia antiquorum* L.,[47] which can be red too, but is also bad smelling: since in atonement rituals the *nikiptu* is connected to the red garment of the priest and is described as producing a bad smell useful to chase away demons, the scholar rejected his former interpretation with the *Liquidambar orientalis* M., which is indeed red, but does not have a bad smell.

Thompson also proposed the equation between the Akkadian *nikiptu*,

42 CAD 11 (N2), 222 [c]: „ŠIM.^{d}MAŠ NITA *kīma quliptu bīni kaṣar u sām ni-kip-tú* SAL *kīma quliptu bīni raqqaqu u arruqu*. "*The male n. is like the bark of the tamarisk, compact and red, the female n. is like the bark of the tamarisk, thin and yellow.*".

43 Heessel – Al-Rawi 2003, 225, 233: „IM 132670 (= Sippar 8/352). Obv. Col. i 16-19 (§5): *16. ana* KI.MIN ^{šim}GÚR.GÚR ^{šim}LI ÚḪ.^{d}ÍD / 17. ^{ú}KUR.KUR ^{im}KAL.LI.GUG KA *tam-tim* / *18. ni-kip-tú* GAZ SIM *ina* Ì.UDU ÉLLAG *u* DUḪ.LÀL / *19.* ḪE.ḪE ÉN UR.SAG ^{d}*Asal-lú-ḫi i-na* UGU ŠIT LAL *(omissis); "in order to ditto [i.e., calm down swelling = blood vessels of the temple] you crush kukru-plant, juniper, ru'tītu-mineral, atā'išu-plant, red paste, imbū tâmtim-mineral, nikiptu-plant, you sieve it, you mix it with tallow from a kidney and wax, the incantation 'the hero Asalluḫi' you recite over it (and then) you bandage (him with it)*".

44 Labat 1959, 14-17: „Louvre AO 11447 (= KAR 202). Rev. 15-17 *: 15. š.* KI.MIN SA$_5$ *ikkal-šú u*[… …] *murṣu šû* IZI *šum-šu ana nasâḫi-šú* ^{riq}*kukru* ^{riq}[*burâšu*(?)] / *16.* ^{riq}*nikiptu zêr* ^{iš}[.. ..] *5 šammû*^{me} *an-nu-te ištêniš*^{niš} *tasâk itti isquqi* x x x x / *17. ina šikari ina tamgu*[*si kī*]*ma rib-ki tar-bak ina mašak(?) ṣêri(?)*$^{me(?)}$ *teṭerriri taṣamid-su*[*-ma iballuṭ(?)*] *(omissis); 15.* "*Si ditto [i.e., du mal sort du corps de l'homme et que son visage et ses yeux soient enflammés], (si ces pustules) sont rouges, lui font mal et [… …] : cette maladie, son nom est « Feu ». Pur l'enlever : (tu prendras) du sapin, [du pin], / 16. du liquidambar, des graines de [.. ..] ; ces cinq plantes, tu les pileras ensemble, avec du son [tu les … ..], / 17. dans un chaudron, tu en feras une décoction ; tu étendras sur une sauvagine (?) ; tu lui en feras un cataplasme : [ainsi il guérira]*".

45 Thompson 1949, 364-367.

46 Thompson 1924, 141-142 [§15].

47 Thompson 1949, 364: „*^{riq}AN-BAR, niqibtu, probably Euphorbia Antiquorum L., or similar*".

the Phoenician νουκουβαρ,[48] and the Greek τιθύμαλλος,[49] described in Dioscorides as male and female,[50] the former tentatively interpreted as the *Euphorbia characias* L., the latter as *Euphorbia myrsinites* L.; furthermore, Thompson suggested that the *nikiptu*-plant, also written with the Sumerogram AN.BAR, could be etymologically linked to the Arabic عنبر (*'anbar*[51]), and explained the Akkadian term *nikiptu* as a loan word from the Syriac term *n'qabh*, "*to pierce*"; moreover, he widened the spectrum of interpretation by advancing as other possible candidates the *Euphorbia nerifolia* and the *Euphorbia nivulia* (interestingly, all these plants are not indigenous in Egypt).[52] Albrecht Goetze also noticed how, in a lexical Sumerian-Akkadian text (PST 1),[53] an equation is established between the Akkadian term *nikiptu* and the Sumerian "ligidba",[54] described in the text as a medical, unfortunately not better defined, plant.[55]

Looking at the Egyptian documentation, we could follow two different paths of analysis: the first one consists in searching for the attestation of the *Euphorbia orientalis* L. and the *Liquidambar orientalis* M. in Egyptian texts; the second way could be to further investigate the term *nikiptu*, looking for a possible Egyptian lexical equivalent in the Egyptian documentation. Moving through the first way of analysis, we can note how in Egyptian medical papyri of the New Kingdom, a plant named **nnjb*,[56] attested twice (once in Ebers,[57] in a fumigation, and once in Chester Beatty VI,[58] in a passage regarding a bandage), was interpreted by Victor Loret as the *Liquidambar orientalis* M.:[59] maybe, this could be a good candidate for a possible equation with the Akkadian *nikiptu*.

This interpretation could be also strengthened by the fact that Renate Germer includes in her volume on the Egyptian medical plants both the *Euphorbia helioscopia* L. and the *Liquidambar orientalis* M. but stresses how only the latter was not indigenous in Egypt, mostly coming from the Levant and

48 Löw 1881, 193.

49 Liddell – Scott – Jones 1996[9], 1792.

50 Dioscorides IV 162.

51 This term probably also influenced the Persian *"'aṃbar"* (see e.g. Steingass 1892, 869), same meaning, very likely a loan word from Arabic.

52 Thompson 1949, 366-367.

53 Goetze 1945.

54 *Electronic Pennsylvania Sumerian Dictionary*, Word ID: o0033111, <http://oracc.org/epsd2/o0033111> (accessed: 19th November 2021); term not attested in Attinger 2021; cf. Brunke – Sallaberger 2010, 50; Waetzoldt 2010, 295-300; Maul 2018, 181-182; Bartash 2019, 205-206.

55 Goetze 1945, 225.

56 von Deines – Grapow 1959, 302-303.

57 *njwbn* (Eb. 852).

58 *njb* (Bt. 10).

59 Loret 1894, 148-152; cf. also Germer 2008, 85.

the Aegean area, also including South-Western Anatolia.[60] Along the path of our second analysis, we can find an interesting mention of an ingredient called *nkpt* (term sometimes considered as a glossa of the term *ꜥg3j*) in some recipes to prepare the *kyphi*:[61] the possible identification of this ingredient is particularly complex, and many hypotheses have been advanced; Maria Carmela Betrò proposed that *nkpt* has to be regarded as a fruit or substance deriving from the plant *ꜥg3j*, whose identification is still uncertain (some scholars advanced an equation with *Mentha piperita* L.);[62] moreover, Betrò mentioned a possible identification of the *nkpt* (compared to the Greek νάκαφθον and the Latin *macir*) with the aril of the nutmeg, i.e. the core of the fruit of the *Myristica fragrans*, the modern mace.[63] Whatever the actual identification is, Betrò (quoting an opinion already advanced by Wolfgang Helck)[64] interestingly stresses how this plant (attested in the 20th Dynasty with the variant spelling *nkp3tj*) can be easily considered as an import from the Near East. Furthermore, the oil *nkftr*, said to come from Sangar (i.e., Babylon)[65] in p. An IV 15, 3, could be the name of an oil obtained from a fruit called *nkpt*.[66] In the end, even if the actual identification of the Akkadian term *nikiptu* and the possible Egyptian counterpart *nkpt* remains obscure, we could envisage a possible provenance of the latter from the Near East; in the case of EA 41, the dispatching of this ingredient from Ḫatti does not definitely mean that the plant was actually produced in Ḫatti, and it is possible that the Hittites served only as intermediaries in sending to the pharaoh an ingredient (plant, fruit, or oil) coming from a place outside the Hittite land.

4. Conclusions

Considering all the aforementioned data, we can now draw some general and preliminary conclusions:

1) some texts from the time of Thutmose III until the beginning of the 19th dynasty quote the exchange of plants between Egypt and Ḫatti (and

60 Germer 2008, 261: „*Euphorbia helioscopia* L., *ist Sonnenwolfsmilch*“; cf. Germer 2008, 287-288: „*Liquidambar orientalis* Miller *Orientalischer Amberbaum (Storaxbaum). Im Südwesten Anatoliens, Nord-Syrien und auf den Inseln Kos und Rhodos ist der Orientalische Amberbaum beheimatet*“.

61 Betrò 1991-1992. For the term *nkpt*, see Wb. 2, 346.4: „*Eine Frucht (bei Kyphibereitung verwendet*)“; cf. the entry *nkp.t* in Wb. 2, 346.3: „*Eine Pflanze*“.

62 Betrò 1991-1992, 46-47, with previous bibliography. For the term *ꜥg3j*, see Wb. 1, 236.3: „*Gummi arabicum(?)*“.

63 For an exhaustive and brilliant discussion on this interpretation, see Betrò 1991-1992, 46-52.

64 Betrò 1991-1992, 48, n. 32, with reference to Helck's publications.

65 For Sangar (*sngr*) = Babylon in the Egyptian texts, see e.g. Gardiner 1947, vol. 1, 209*-212* [n. 286]; vol. 2, 323-324.

66 See Markham – Panayotov 2020, 253-254, note 46'; cf. also Hoch 1994, 194-195, nos 260-61.

vice versa);
2) during the Amarna Age, at least one plant is specifically sent from Ḫatti to Egypt (see EA 41), namely the *nikiptu*-plant;
3) a possible identification of the *nikiptu*-plant with the *Liquidambar orientalis* M. or a kind of *Euphorbia* (the former not indigenous in Egypt) can be advanced (even if both the identifications are not definitive);
4) during the Ramesside period (see ÄHK**)**, only plants sent from Egypt to Ḫatti are attested (even if without indication of the name of the plant);
5) a "*flower/blossom of Ḫatti*" is mentioned in oCairo CGC 25218 + oDeM 1266; even though a possible connection of the Egyptian and Anatolian terms (*ḥrr.t* and *alil-*/*alel-*) seems to be unlikely, the mention of this specific "*Hittite flower*" is nonetheless interesting.[67]

This paper is a simple specimen of how we can further investigate, through the attempt of crossing Egyptian and Hittite sources, the relationships between Egypt and Ḫatti on regard of the exchange of plants for medical purposes; despite many aspects still need for sure further research, and besides the sometimes foggy identifications of specific terms, I believe this way of research (i.e. reading synoptically Egyptian and Near Eastern documentation) will benefit us with new insights on the contacts between Egypt and Ḫatti, crossing old boundaries and creating new bridges.

Abbreviations

ÄHK = Edel, Elmar, *Die ägyptisch-hethitische Korrespondenz aus Boghazköi in babylonischer und hethitischer Sprache*. Opladen: Westdeutscher Verlag 1994.
CAD = Roth, Martha T. (ed. in chief), *The Assyrian Dictionary of the Oriental Institute of the University of Chicago*. Chicago: Oriental Institute 1964-.
CTH = Laroche, Emmanuel, *Catalogue des textes hittites*. Paris: Klincksieck 1971; online (updated version) at <https://www.hethport.uni-wuerzburg.de/CTH/> (accessed: 19th November 2021).
EA = El-Amarna letters; see Schniedewind – Cochavy-Rainey 2015.
HED = Puhvel, Jaan, *Hittite Etymological Dictionary*. Berlin-New York: de Gruyter 1984-2017.
HEG = Tischler, Johannes, *Hethitisches etymologisches Glossar*. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck 1983.
HH = Tischler, Johannes, *Hethitisches Handwörterbuch*. Innsbruck: Institut für Sprachen und Literaturen der Universität Innsbruck 2001.
HPM-K = Košak, Silvin, *Konkordanz der hethitischen Keilschrifttafeln*. online at

67 On this topic, cf. also Breyer 2010a, 388-392.

<https://www.hethport.uni-wuerzburg.de/hetkonk/hetkonk_abfrageF.php> (accessed: 19th November 2021).

HW² = Friedrich, Johannes – Kammenhuber, Annelies – Hofmann, Inge, *Hethitisches Wörterbuch. Zweite völlig neubearbeitete Auflage auf der Grundlage der edierten hethitischen Texte*. Heidelberg: Winter 1975-1984.

KBo = *Keilschrifttexte aus Boghazköy*. Leipzig: Hinrichs, 1916-1923. Berlin: Mann 1954ff.

K*RI* II = Kitchen, Kenneth A., *Ramesside Inscriptions: Historical and Bibliographical. Volume II*. Oxford: Blackwell 1979.

K*RITA* II = Kitchen, Kenneth A., *Ramesside Inscriptions. Translated and Annotated. Translations. Volume II. Ramesses II, Royal Inscriptions*. Oxford: Blackwell 1996.

KUB = *Keilschrifturkunden aus Boghazköy*. Berlin: Akademie-Verlag 1921ff.

Urk. IV = Sethe, Kurt, *Urkunden der 18. Dynastie: Historisch-biographische Urkunden, 1. Band*. Berlin: Akademie-Verlag 1906.

Wb. = Erman, Adolf – Grapow, Hermann, *Wörterbuch der ägyptischen Sprache*. Berlin: Akademie-Verlag 1926-1963.

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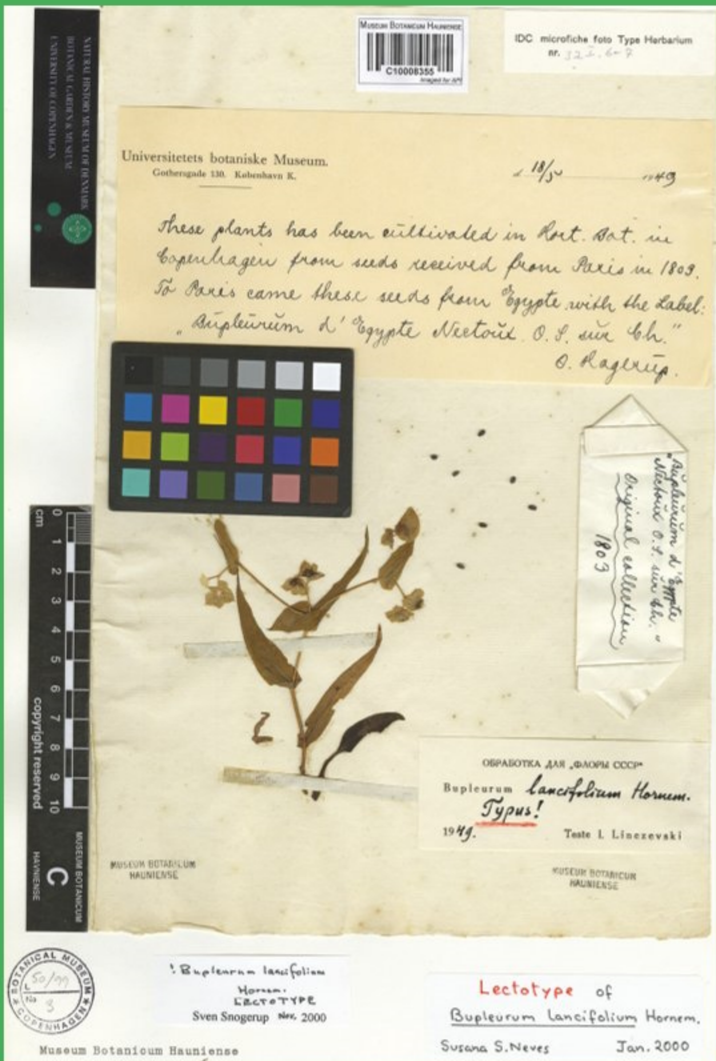

NATURAL HISTORY MUSEUM OF DENMARK
BOTANICAL GARDEN & MUSEUM
UNIVERSITY OF COPENHAGEN
MUSEUM BOTANICUM HAUNIENSE
C10008355
IDC microfiche foto Type Herbarium
Universitetets botaniske Museum.
Gothersgade 130. København K.
d. 18/5 1949
These plants has been cultivated in Hort. Bot. in Copenhagen from seeds received from Paris in 1809.
To Paris came these seeds from Egypte with the Label:
„Bupleurum d' Egypte Nectoux O. S. sur Ch."
O. Hagerup.
Original collection
1809
cm
copyright reserved
ОБРАБОТКА ДЛЯ „ФЛОРЫ СССР"
Bupleurum lancifolium Hornem.
Typus!
1949.
Teste I. Linczevski
MUSEUM BOTANICUM HAUNIENSE
MUSEUM BOTANICUM HAUNIENSE
BOTANICAL MUSEUM COPENHAGEN
! Bupleurum lancifolium Hornem.
LECTOTYPE
Sven Snogerup Nov. 2000
Lectotype of
Bupleurum lancifolium Hornem.
Susana S.Neves Jan. 2000
Museum Botanicum Hauniense