

A COMPARISON BETWEEN THE MEDICAL PLANTS MENTIONED

IN GRAECO-ROMAN AND ANCIENT EGYPTIAN PAPYRI

By

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The ancient Egyptian pharmacopoeia as we know it from the available papyri, especially from the Ebers papyrus, is extremely wealthy. Unfortunately our knowledge of the exact nature of its items is sadly deficient and authors differ widely in their interpretations. Thus, out of 317 plants, Germer¹, the most critical of these authors, accepted only 31 translations as correct.

Recently, M.-H. Marganne published an inventory of Greek medical papyri from different Egyptian sources (I.A.)² followed by addenda that she very kindly communicated to us, in which plants are named.

While recognizing that such lists cannot be definitive, considering the many lacunae they contain and the ever-existing possibility of discovering new documents, we are attempting in the present, preliminary work to compare the names of the plants it mentions with the names of Egyptian plants of which the identification is more or less generally accepted mainly by Germer¹ and by the Wörterbuch der Drogenanmen of von Deines and Grapow³. Such a comparison could be used as a test of the usually accepted working hypothesis that there persisted between Pharaonic, Graeco-Roman and Byzantine-Coptic times, a sufficient continuum to rely on similarity of names in identification. In a further work

we intend to compare the use of cognate drugs in both medicines the further to assess this hypothesis.

I. Egyptian and Greek names

We retained 57 Egyptian names as fairly certain. In 8, a similarity of names with Greek could be discussed. In 5, there is general agreement on meanings: hebeny (Eg.) and EBENON (Gr.); kmy.t and KOMMIOS (gum); m3t.t (celery) quoted as SELINON in the I.A. but called MI by Dioscorides (III,64); k3k3 and KIKI, translated in the I.A. gall-nut but known to have meant also Ricinus in Greek; and ins.t that the Wörterbuch⁴ translated Pimpinella anisum and that corresponds to Ανιθον.

A sixth Πετροβειβον is a literal Greek translation of m3t.t h3s.t, desert celery, the Egyptian name of parsley. A seventh is identical except for a metathesis of the first two consonants, gsfn and Greek sagapen Σαγαπεν (asafetida).

The eighth is speculative because of the uncertainty that reigns in the ancient Egyptian names of legumes. Cognate names in Egyptian, Greek and Coptic, seem to designate different but related plants. Egyptian iwrj.t designates Vigna sinensis (Gm); Greek OPOBO is the name of the vetch (I.A.) (Vicia sativa), and OYPO in Coptic designates Vicia faba (F1).

II. Greek and Coptic

Thirteen appeared identical in Greek and Coptic.

TABLE 1

	Greek	Coptic		Greek	Coptic
<i>Boswellia carterii</i> Birdw.	ΛΙΒΑΝΟ	ΛΙΒΑΝΟ	<i>Melilotus</i> sp.	ΜΕΛΙΛΟΤΟΝ	ΜΕΛΙΛΟΤΟΝ
<i>Ricinus communis</i> L.	ΚΙΚΙ	ΚΙΚΙ	<i>Apium graveolens</i> L.	ΞΕΛΙΝΟΝ ΜΙΘ	ΣΕΛΙΝΗ ΜΙΤ
<i>Acacia nilotica</i> (L.) Willd. ex Del.	ΚΟΜΜΕΟΝ	ΚΟΜΙ	<i>Cinnamomum cassia</i> Blume	ΜΑΛΑΒΑΘΡΟΝ	ΜΑΛΑΒΑΘΡΟΝ
<i>Cyperus papyrus</i> L.	ΚΙΤΕΡΕΟΣ ΧΑΡΤΥΞ	ΧΑΡΤΙC	<i>Ceratonia siliqua</i> L.	ΚΕΡΑΤΙΑ	ΧΙΕΙΡΕ
<i>Anethum graveolens</i> L.	ΑΝΗΘΟΝ	ΕΜΙCΕ	<i>Raphanus sativus</i> L.	ΡΑΨΑΝ	ΡΑΨΑΝΟΝ
<i>Commiphora myrra</i> (Nees) Engler	ΖΜΥΡΝΟΝ	CΜΗΡΝΗ	<i>Styrax officinalis</i> L.	ΣΤΥΡΞ	CΤΗΡΞ
<i>Myrtus communis</i> L.	ΜΥΡΤΟΝ	ΜΟΥΡCΙΝΕ			

III. Egyptian and Coptic

The greatest concordance was naturally found between Egyptian and Coptic. Limiting ourselves to our selection of 57 names, we noted this concordance 26 times, 5 through Greek, the rest by-passing it. In 2, there are 2 Coptic names for the same plant. One is cognate with Greek; m3t.t (celery) is both MI = MIT; and Σελινον, Σελινη; The other, only with Egyptian sntr has been translated by different authors terebinth, Coptic CONTE, by others frankincense, Greek and Coptic Λιβανον (Table 2)

TABLE 2

IV. Coptic and Arabic

It is moreover interesting to compare Coptic and Arabic. We found 2 similarities (Table 2).

In 2, the filiation Greek, Coptic and Arabic is obvious; qirtas, murr, liban and kammun. In 2, Egyptian by-passed Greek and reached Arabic through Coptic: Sawsan, Herman and Sunt. But Coptic, FEL, OPION, HELTHITH φελ, οπιον, ζελθιθ sound purely Arabic.

It is curious, however, not to find in the I.A. and its addenda any mention of many plants in common usage, all occurring in Egyptian and Coptic texts, like raphanum, mentioned only as a cause of vomiting in the I.A. and not as a drug, wheat, zizyphus spina Christi, the sycamore fig, salix,

and moringa aptera. We can think of no reason except the incompleteness of the Greek texts. Let us hope that further discoveries will complete the gaps and allow us a better understanding of the ancient Egyptian pharmacopoeia.

Conclusions

There is a close resemblance between many ancient Egyptian, Greek, and Coptic names of medicinal plants. Sometimes the three agree. This suggests a continuous filiation. At others Coptic seems to be derived directly from Egyptian having bypassed Greek. In others still, Greek and Coptic agree independently of ancient Egyptian, suggesting a direct borrowing. Arabic, likewise, seems at times derived from ancient Egyptian or Greek. We intend to pursue this work with a comparative study of the indications of these plants, the further to assess the truth of the hypothesis: similar names = similar identical plants.

Note: Except when otherwise stated, all Greek names are taken from the I.A. and Coptic words from Till (T).

Abbreviations: Fl: Loret, V., 1892, La Flore Pharaonique, Paris: Ernest Leroux; Gm: Germer (1) ; Gr: Grundriss (3); I.A. Marganne (2); n.m.: not mentioned; T:Till, W., 1951, Die Arzneimittel der Kopte, Berlin: Akademie-Verlag.

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TABLE 2

	<u>Egyptian</u>	<u>Greek</u>	<u>Coptic</u>	<u>Arabic</u>
Acacia sp.	√ snd.t (Gm)	AKAKIA	ⲘⲚⲐⲚⲐ	sunt
Acacia nilotica (L.) Willd. ex Del.				
Acacia verec Gill. & Perr.	kmj.t	ΚΟΜΜΙΟΞ	KOMI	
Allium cepa L.	hdw (Gm)	ΧΡΟΜΙΑΥΟΝ	ETIT	
Allium porrum L.	i3k.t (Gm)	ΠΡΑΣΟΝ	HCE	
Allium sativum L.	hdw	ΣΚΟΡΔΟΝ	ⲘⲘⲘ HN	
Prunus dulcis (Mill.) D.A. Webb = Amygdalus communis L.	hm3j.t? (Gm)	ΑΜΥΓΔΑΛΑ	n.m.	
Anethum graveolens L.	ims.t (Gm)	n.m.	EMICE	
Apium graveolens L.	m3t.t (Gm)	ΜΙΘ	MIT	
		ΣΕΛΙΝΟΝ	CELINH	
Artemisia absinthium L.	s ^c 3m (D)	ΑΨΙΝΘΙΟΝ		
Boswellia sp. (a)	sntr (Gm)	ΛΙΒΑΝΟΥ	ΛΙΒΑΝΟΥ CONTE	
Bryonia cretica L.	h3sj.t	ΑΜΗΕΛΟΝ	n.m.	
Ceratonia siliqua L.	ndm (Gm)	ΚΕΡΑΤΙΑ	XIEIPE	
Cistus villosus L.	ibr	ΛΑΔΑΝΟΝ	n.m.	
Commiphora myrrha (Nees) Engler	^c ntjw (Gm)	ΖΜΥΡΝΟΝ	CMHRNH MOP	murr
Cordia myxa L.	√ swb	ΠΕΡΣΕΑΣ	n.m.	
Coriandrum sativum L.	pr.t s3w	ΚΟΛΙΑΝΔΡΟΝ	ΒΕΡⲘⲘⲘ OY	
Cucumis sativus L.	√ sb.t (Gm)	ΣΙΚΥΟΝ	ⲘⲘⲘ WBE	
Cuminum cyminum L.	pnn (Gm)	ΚΥΜΙΝΟΝ	TA N	kammur
Cyperus papyrus L.	mhj.t (Gm)	ΒΙΒΛΙΝΟ ΧΑΡΤΥΣ	XAPTHC	qirtas
Diospyros ebenum Koenig	hbnj (Gm)	ΕΒΕΝΟΝ	n.m.	
Foeniculum vulgare Mill.	bsbs ?	ΜΑΡΑΘΟΝ	ⲘⲘⲘ AMAP	shamar
Ferula assa-foetida Regel (b)		ΣΑΔΑΠΕΝ	ΖΕΛΘΙΘ	heltit
Ficus carica L.	d3b (Gm)	ΣΙΚΗΞ	KHTE	
Hordeum sp.	i.t (Gm)	ΚΡΙΘΗ	EIWT	
Juniperus communis L. 1	w ^c _n (Gm)	ΚΕΔΡΙΑΞ	PERSHOU	
Juniperus excelsa M. Bieb.			(F1.)	

a) + Boswellia carterii Bird.

b) + Ferula galbaniflua Boiss.

	<u>Egyptian</u>	<u>Greek</u>	<u>Coptic</u>	<u>Arabic</u>
ctuca sativa L.	ibw, ^c bw	ΑΡΙΘΑΚΙ	ΠΙ:WB	
ns culinaris Medik.	^c rsn (F1)	ΦΑΚΟΝ	ΑΡ III IN	
num usitatissimum L.	mhj (Gm)	ΜΙΝΟΣΠΕΡΜ	MAZE	
lilotus sp.	^c f3	ΜΕΛΙΑΩΤΟΝ	ΜΕΛΙΑΙΤΟΝ	
ntha pulegium L.	ni3i3(L)	ΒΛΗΧΩΝ	n.m.	ne ^c na ^c
rtus communis L.	ht-ds ??	ΜΥΡΤΟΝ	ΜΟΥΡCΙΝΕ	
mphaea lotus L.	^v ssn (Gm)	ΑΙΡΥΓΙΤΙΟΣ	III O III EN	sawsan
paver somniferum L.				
troselinum hortense Hoffm.	m3t.t h3s.t	ΠΕΤΡΟΣΕΛΙ NON	MIT	
oenix dactylifera L.	bnr (Gm)	ΦΑΙΝΙΚΙΟΝ	BHNNE	
mpinella anisum L.	ins.t ?	ΑΝΗΘΟΝ	n.m.	ansswn
nus sp. (oil)	sft	(Cedar)	CI Ø E	qatran
stacia terebinthus L.	sntr	ΤΕΡΕΒΙΝΘΙ	CONTE	
nica gracatum L.	inhmn	ΡΩΝ	ZERMAN	orman
tis vinifera L. (raisin - dry)	irr.t	n.m.		
phanus sativus L.	smw ? (Gm)	ΡΑΦΑΝ	(Gm) CIM	
cinus communis L.	k3k3	KIKI	KIKI	
	dgm (Gm)			
lix alba L.	yt.t (Gm)	n.m.	TWPE	
yrax officinalis L.	hdw ?	ΣΤΥΡΑΕ	CTHPZ	astara
imarix nilotica Ehrbg.	isr	n.m.	n.m.	
ymus sp.	innk?	ΘΥΜΟΝ	ENI	
iticum diccocum L. and	sw.t	n.m.	COYO	
aestivum L. (T. sativum Lam.)				
cia faba L.	--	--	OYPO (F1)	Ful
cia sativa L.	--	ΘΡΟΒΟΣ	--	
igna unguiculata (L.) Walpers	iwrj.t (Gm)	--	--	
. sinensis (L.) Savi ex.				
lassk.) (Leguminosae)				
itex agnus-castus L.	s ^c 3m (D)			

) According to Till (p. 103) Pinus cedrus* L. Juniperus Sp. were often substituted.

Synonym for Cedrus Libani A.Bech.