

if botanists did not. From the *Leningrad Code* (1978) to 2018, first in printed form and then online, the list of conserved generic names in Appendix III once again cited the type as *A. glandulosa*, again implying that the generic name was feminine.

In 2018, an e-mail correspondence among K. Gandhi of IPNI, G. Zijlstra of ING, and W. Greuter led to the latest change in Appendix III online (<https://naturalhistory2.si.edu/botany/codes-proposals/>), in which the type is cited again as the masculine form *A. glandulosus*. Since then, IPNI, ING, Tropicos, and the digital floras on the efloras.org site have been updated to show *Ailanthus* as masculine.

That 2018 correspondence cited Art. 62.2(c) (Turland & al. in *Regnum Veg.* 159. 2018) as the reason for the change (J.H. Wiersma, pers. comm.), but it is debatable whether this Article applies to *Ailanthus*. Article 62.2 concerns the gender of compound generic names and cites only Greek words and endings. Clause (c) states in part: “names ending in *-anthos* (or *-anthus*) [...] ought to be neuter, because that is the gender of the Greek words *ἄνθος*, *anthos*, [...] but are treated as masculine in accordance with tradition.” First, as shown above, there is no botanical tradition of treating *Ailanthus* as masculine for Art. 62.2(c) to preserve. Second, *Ailanthus* ends in *-anthus*, but this ending does not come from the Greek word *ἄνθος*. Desfontaines took his name not from Greek, but from “*l’arbor coeli* de Rumphius, *hort. amboin. que les Indiens appellent ailanthe, dans leur langue*” (Desf. in *Hist. Acad. Roy. Sci. Mém. Math. Phys.* (Paris, 4to) 1786 (Mém.): 271. 1788). (Rumphius in fact spelled the vernacular name *aylanto*. This led later authors to spell the generic name *Ailantus*, *Aylanthus*, or *Aylantus* [Sprague, l.c.]). Third, *Ailanthus* may not even be a compound name in the sense of Art. 62.2. Desfontaines and Rumphius before him treated the vernacular name that was the source of *Ailanthus* as a single word. That vernacular name indeed appears to have been derived from two words in a language of central Maluku (Molucca Islands), *ai* meaning “wood” or “tree” and *lanit*, *lanito*, *laniol*, or *lanitol* meaning “sky” (Sprague, l.c.; Collins

in *Pacific Linguistics* D-47: 45, 59, 70, 76, 96. 1983; Merriam-Webster, Merriam-Webster.com dictionary. 2021, <https://www.merriam-webster.com/dictionary/ailanthus>), but Desfontaines gave no indication that he knew of that derivation. If Desfontaines and later authors did not treat *Ailanthus* as a compound, it is debatable that Art. 62.2 applies to the name.

Instead, since *Ailanthus* is derived from a vernacular name, Art. 62.3 seems to apply: “Arbitrarily formed generic names or vernacular names or adjectives used as generic names, of which the gender is not apparent, take the gender assigned to them by their authors.” The question here is whether an ending *-anthus* that is not derived from Greek has a gender that is apparent.

If neither Art. 62.2 nor Art. 62.3 applies, then Art. 62.1 should apply: “A generic name retains the gender assigned by nomenclatural tradition, irrespective of classical usage or the author’s original usage.” Here the author and tradition agree: The author of *Ailanthus* treated it as feminine and nomenclatural tradition overwhelmingly treats *Ailanthus* as feminine.

In any event, conserving the gender of *Ailanthus* as feminine will preserve nomenclatural tradition and improve nomenclatural stability by protecting the specific and infraspecific epithets in the genus from shifting interpretations of Art. 62. Stability is particularly important in this case because the feminine *Ailanthus altissima* is well known and widely used as the name of a horticulturally important and often highly invasive species.

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Acknowledgments

I thank Gerry Moore for his thoughtful comments and particularly for his research on the gender of *Ailanthus* in past *Codes*.

(2822) Proposal to conserve the name *Cachrys libanotis* (*Umbelliferae*) with a conserved type

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DOI <https://doi.org/10.1002/tax.12519>

First published as part of this issue. See online for details.

(2822) *Cachrys libanotis* L., Sp. Pl.: 246. 1 Mai 1753 [Angiosp.: *Umbell.*], nom. cons. prop.
Typus: Italy, Sicily, Trapani, pr. Érice, 30 Mai 2000, Güemes & al. JGH-3097 (VAL barcode VAL 119667!; isotypus: SALA barcode SALA 106653!), typ. cons. prop.

The present proposal deals with the situation surrounding the name *Cachrys libanotis* L. (Sp. Pl.: 246. 1753) (*Umbelliferae*), which has been long used for a European species in a sense not including its type. *Cachrys libanotis* is the type of the generic name *Cachrys* L., and its typification is relevant for establishing the correct species

names to be included in the genus, either those otherwise referred to *Prangos* Lindl. (in Quart. J. Sci. Lit. Arts 19: 7. 1825) or those formerly to *Hippomarathrum* Link (Enum. Hort. Berol. Alt. 1: 271. 1821) (see Gruenberg-Fertig & al. in Taxon 22: 425–434. 1973).

In its current usage, sensu *Hippomarathrum* Link, the genus *Cachrys* is widely distributed in the Mediterranean basin. It is endemic to southern Europe, Asia and northern Africa where it is represented by five different species (*C. crassiloba* (Boiss.) Meikle, *C. cristata* DC., *C. libanotis*, *C. pungens* Jan ex Guss., *C. sicula* L.) (see Pimenov & Tikhomirov in Feddes Repert. 94: 149. 1983; Lyskov & al. in Phytotaxa 299: 223–233. 2017). *Cachrys libanotis* is distributed in the western Mediterranean region in Spain, France, Italy (incl. Sicily and Sardinia), extending to southern Portugal and Morocco (Tutin, Fl. Europ. 2: 343. 1968; El Alaoui Faris & Ibn Tattou, Fl. Pract. Maroc 2: 303. 2007; Pignatti, Fl. Ital., ed. 2, 3: 576. 2018). This species shows leaves divided, with lobes 5–10 × 1.5–2.5 mm, rigid, often dentate; bracts of central umbel entire, simple or sometimes 2–3-fid; rays 8–15; sepals present; fruit not more than 10 mm long, 6–7 mm broad, dorsally non-compressed, covered by irregular tubercles (Tutin, l.c.; Pimenov & Tikhomirov, l.c.; Jury in Castroviejo & al., Fl. Iberica 10: 153. 2003).

Linnaeus (l.c.) published *Cachrys libanotis* providing a short diagnosis “CACHRYIS foliis pinnatis: foliolis acutis multifidis” cited from Linnaeus (Hort. Cliff.: 94. 1738), Van Royen (Fl. Leyd. Prodr.: 99. 1740), and Sauvages (Meth. Fol.: no. 105 [on page 256]. 1751), and followed by two synonyms: “Cachrys semine fungoso sulcato plano minore, foliis peucedani angustis” cited from Morison (Pl. Hist. Univ. 3: 267, sect. 9, t. 1, fig. 3 & 6. 1699) and “Libanotis ferulae folio, semine anguloso” from Bauhin (Pinax: 158. 1623). The protologue includes the loci classici “Habitat in Sicilia, Monspe- lii”. Morison (l.c.) provided two illustrations, “Cachrys semine fungoso sulcato aspero minore, foliis Peucedani, Nobis” (l.c.: sect. 9, t. 1, fig. 3) and “Cachrys sem. [semine] fungoso sulcato plano minore, foliis Peucedani, Nobis” (l.c.: sect. 9, t. 1, fig. 6), which can be considered original material (images of the illustrations available at <https://bibdigital.rjb.csic.es/viewer/14345/?offset=#page=753&viewer=picture&o=bookmark&n=0&q=>).

In addition, there is a sheet in the Burser Herbarium at UPS (Herb. Burser VIII: 30 [UPS-BURSER]) linked to the synonym cited under “Libanotis ferulae folio, semine anguloso” by Linnaeus in the protologue; this specimen is undoubtedly part of the original material (see below). Furthermore, in the Van Royen Herbarium, there is a specimen, Herb. Lugd. Bat. No. 908.260-772, L 902280 (with barcode L 0141116), which bears only a leaf. It is annotated at the base of the specimen “Herb. van Royen” and contains also a label annotated as “A Cachriis; semine fungoso / sulcato, plano, mayore, foliis / peucedani angustis. Mór. Umb. / 624. Cachriis venior Libanotis / Galeni. Lob. Ic. 783. Libano - / tis cachryophoros quibusdam, floribus luteis B. 3. P. 40!” This specimen preserved in the Adriaan van Royen Herbarium is original material because Linnaeus worked with A. van Royen and consulted his herbarium for the preparation of Leiden’s Hortus Botanicus during his stay in this city before departing to Sweden in 1738 (Jarvis, Order out of Chaos: 153. 2007). We have been unable to trace any further original material in any of the other Linnaean or Linnaean-linked herbaria.

The first lectotype designation of *Cachrys libanotis* and the whole situation are described well in detail by Gruenberg-Fertig & al. (l.c. 1973), with some differences regarding interpretation of certain aspects and possible ways of solving the problem. Gruenberg-Fertig & al. (l.c. 1973: 431, fig. 4) designated as lectotype of *C. libanotis* the Burser specimen at UPS (Herb. Burser VIII: 30) (see Jarvis, l.c.:

371). This specimen bears four plant fragments: an umbel with mature fruits, a separate leaf, a leaf with a basal part of the plant, and a stem with leaves and immature umbels; the sheet bears also an original label annotated as “Libanotis Ferulae folio, semini an / guloso Bauh. / Cachrys minor, Libanotis Galeni Lob. / Nom procul Monspeli in monte”. However, this specimen at UPS can be identified as belonging to *C. trifida* Mill. (Gard. Dict., ed. 8: *Cachrys* No. 1. 1768), a name that for over 250 years was unambiguously applied for another European plant, but by this typification would become a synonym of *C. libanotis*.

At the same time, the illegitimate generic name *Hippomarathrum* Link (l.c.) was proposed for conservation against its earlier homonym *Hippomarathrum* G. Gaertn. & al. (Oekon. Fl. Wetterau 1: 249. 1799) by Gruenberg-Fertig & al. (in Taxon 23: 438. 1974). However, the Committee for Spermatophyta (Brummitt in Taxon 27: 286. 1978) did not recommend the proposal, dealing with the conservation of generic names, and this action was based on its refusal to accept the existing typification of *Cachrys*: “The type species of *Cachrys* L. is *C. libanotis* L., and after detailed consideration the committee has concluded that the type of the latter is a figure, tab. 1, fig. 6 in Morison, Hist. pars. 3, and not the specimen in the Burser herbarium selected by the proposers as the type.” This typification of *Cachrys* in the sense of *Hippomarathrum* Link contradicted the earlier one of Gruenberg-Fertig & al. in the sense of *Prangos*. The Committee’s view came to be accepted thereafter, with usage of *Prangos* revived, and *P. trifida* (Mill.) Herrnst. & Heyn (in Boissiera 26: 58. 1977) published to replace *C. libanotis* sensu Gruenberg-Fertig & al. (l.c. 1973). A lectotype for *C. trifida* Mill. was designated by Herrnst. & Heyn (l.c.) as the Morison illustration: Pl. Umbell.: t. 3, fig. 1. 1672 (image of the illustration available at <https://bibdigital.rjb.csic.es/viewer/12179/?offset=5#page=122&viewer=picture&o=bookmark&n=0&q=>).

However, the statement by the Committee for Spermatophyta does not change the fact that under Art. 9.19 of the *Shenzhen Code* (Turland & al. in Regnum Veg. 159. 2018) the type of *Cachrys libanotis* is indeed “Herb. Burser VIII: 30 (UPS)”. Under the *Leningrad Code*, the relevant Article of which was Art. 8.1 (“8.1 The author who first designates a lectotype or a neotype must be followed, but his choice is superseded if the holotype or, in the case of a neotype, any of the original material is rediscovered; it may also be superseded if it can be shown that the choice was based upon a misinterpretation of the protologue, or was made arbitrarily”; see Stafleu & al. in Regnum Veg. 97. 1978). However, there was no misinterpretation of the protologue by Gruenberg-Fertig & al. (l.c. 1973), their typification was in accordance with the *Code* rules and was therefore effective.

It was only in Sydney in 1981 that the possibility of supersession was made more precise and was only possible “if it can be shown that it is in serious conflict with the protologue” (see Voss & al. in Regnum Veg. 111. 1983). As “Libanotis ferulae folio, semine anguloso. Bauh. pin. 158” was cited by Linnaeus as a synonym of *C. libanotis* and as the Burser specimen seen by him (Gruenberg-Fertig & al., l.c. 1973: 431) is identified as “Libanotis ferulae folio semine anguloso”, it can hardly be in conflict with the protologue, even if not directly cited (cf. *ICN* Art. 9 Note 7).

The preservation of *Cachrys libanotis* is desirable, but noting that the current type of the name is a specimen identifiable with *Prangos trifida*, we consider the better solution of this problem might be reached by applying Art. 14.9 of *ICN*. Therefore, conservation of the name *Cachrys libanotis* with a conserved type is proposed here. Thus, we here propose a complete and well-preserved specimen at

VAL (barcode VAL 119667) as the conserved type, with a duplicate at SALA (barcode SALA 106653). This specimen shows all diagnostic characters and was collected in Sicily (Trapani, pr. Érice), a locality that matches with one of the provenances mentioned by Linnaeus in the protologue “*Habitat in Sicilia* [...]”. This typification agrees with the position taken by the Committee for Spermatophyta (Brummitt, l.c.), though ineffectively, and would preserve usage of *Cachrys* in the sense of *Hippomarathrum* Link.

Rejection of the present proposal would have an undesirable consequence because the name *Cachrys libanotis* should be applied to the species currently known as *Prangos trifida* (\equiv *C. trifida*), and another name, based on *Hippomarathrum bocconii* Boiss. and under an as-yet-uncertain genus name (see Gruenberg-Fertig & al.,

l.c. 1974), would have to replace what has been called *Cachrys libanotis* up to now.

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Acknowledgements

We thank Dr. John McNeill and Dr. John Wiersema for their advice, assistance, and valuable comments that improved this proposal. Thanks also to Mats Hjertson (UPS), Javier Hernández García (SALA), and Roxali Bijmoer (L) for help in the study of the herbarium sheets, and Leopoldo Medina (MA) for help in providing several references.