

## REQUESTS FOR BINDING DECISIONS ON APPLICATION OF THE CODE

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**(48) Request for a binding decision on whether *Scilla* L. (*Hyacinthaceae* subfam. *Hyacinthoideae*) and *Squilla* Steinh. (*Hyacinthaceae* subfam. *Urgineoideae*) are sufficiently alike to be confused**Mario Martínez-Azorín<sup>1</sup> & Manuel B. Crespo<sup>1</sup>*dCARN* (Dept. de Ciencias Ambientales y Recursos Naturales) & *CIBIO* (Instituto Universitario de la Biodiversidad), Universidad de Alicante, P.O. Box 99, 03080 Alicante, SpainAuthor for correspondence: Mario Martínez-Azorín, [mmartinez@ua.es](mailto:mmartinez@ua.es)DOI <https://doi.org/10.12705/656.27>***Scilla* L. (1753) [Angiosp.: Lil. / Asparag.]**

*Scilla* was described by Linnaeus (Sp. Pl.: 308. 1753) and comprised eight species from the Mediterranean basin, Europe and SW Asia that are currently included by Speta (in *Phyton* (Horn) 38: 1–141. 1998; in Kubitzki, *Fam. Gen. Vasc. Pl.* 3: 261–285. 1998; in *Stapfia* 75: 139–176. 2001) in the eight genera *Cathissa* Salisb. (including *S. unifolia* L.), *Charybdis* Speta (including *S. maritima* L.), *Hyacinthoides* Medik. (including *S. italica* L.), *Oncostema* Raf. (including *S. peruviana* L.), *Othocallis* Salisb. (including *S. amoena* L.), *Prospero* Salisb. (including *S. autumnalis* L.), *Scilla* L. (including *S. bifolia* L.) and *Tractema* Raf. (including *S. lilio-hyacinthus* L.).

In Speta's concept of *Scilla* L. (s.str.), plants belonging to this genus show minute or absent bracts, absent bracteoles, blue perigone segments (from almost free to fused up to 40% of their length), blue and ovate ovary, and globose seeds with elaiosome (Speta, l.c. 1998; Speta in Kubitzki, l.c.). Speta includes 30 species in *Scilla*, but, alternatively, in a broad sense, the genus comprises around 80 species (The Plant List, 2016: <http://www.theplantlist.org/tpl1.1/search?q=Scilla>), including *Autonoe* Speta, *Chionodoxa* Boiss., *Chouardia* Speta, *Nectaroscilla* Parl., *Oncostema*, *Othocallis*, *Pfosseria* Speta, *Schnarfia* Speta, and *Tractema* as synonyms.

Typification of *Scilla* L. has been widely attributed to Hitchcock (in Sprague, *Nom. Prop. Brit. Bot.*: 146. Aug 1929) who selected *S. bifolia* L. (vide *Index Nominum Genericorum*, 2016: <http://botany.si.edu/ing/>; Speta, l.c. 1998: 121). However, Rafinesque (*Fl. Tellur.* 3: 8. 1837) had previously effectively designated *S. maritima* as the type of the generic name. As detailed by Martínez-Azorín & Crespo (in *Taxon* 65: 1427–1428. 2016), Rafinesque's typification must be followed (Art. 10.5 of the *ICN*; McNeill & al. in *Regnum Veg.* 154. 2012) unless, as proposed (Martínez-Azorín & Crespo, l.c.), *Scilla* is conserved with a different type, such as Hitchcock's (l.c.) choice of *Scilla bifolia*, which will maintain current usage of *Scilla* and of both subfamily *Urgineoideae*, used in *Hyacinthaceae*, and tribe *Urgineae* used in *Asparagaceae*.

***Squilla* Steinh. (1836) [Angiosp.: Lil. / Asparag.]**

*Squilla* was described by Steinheil (in *Ann. Sci. Nat., Bot., sér.* 2, 6: 276. 1836) to segregate *Scilla maritima* (= *U. scilla* Steinh., nom. superfl.) from his previously described *Urginea*. In the protologue of *Squilla*, he clearly explained that *Scilla maritima* differed strongly from the species of *Ornithogalum* L., *Stellaris* Moench and *Scilla* L. and argued the necessity of creating a new genus to accommodate that species. Steinheil (l.c. 1836: 274) clearly stated phonetic differences between both *Scilla* and *Squilla* as follows: “Je propose d'appliquer

à celui que j'entrepris d'établir ici le nom de *Squilla* qui a été souvent aussi donné à la Scille, qui dérive du grec *σχυλλη* ou mieux de *σχυλλω* (je détruis) aussi bien que *Scilla*, et diffère cependant assez de ce dernier pour pouvoir être conservé en même temps que lui; on ne sera donc pas obligé de changer le nom des espèces nombreuses qui sont encore aujourd'hui partie du genre primitif.” Furthermore, Steinheil (l.c. 1836: 276) circumscribed his *Squilla* to include only two species: *Squilla maritima* and *S. pancration*. This generic concept differed from his previous treatment of *Scilla* s.str. which comprised blue-flowered species, as described in his observations on the *Scilla* species growing in Barbary (northwestern Africa) (Steinheil in *Ann. Sci. Nat., Bot., sér.* 2, 1: 99–108. 1834). Pfeiffer (*Nom.* 2(2): 1252. 1874) designated *Squilla maritima* as the type of *Squilla*, which at the moment makes it a superfluous name for *Scilla* (or else an orthographic variant), since it is homotypic with *Scilla* as typified by Rafinesque (l.c.).

Steinheil's concept of *Squilla* was accepted by Jordan & Fourreau (*Icon. Fl. Eur.* 2: 1–2. 1868) who added four additional species: *Squilla sphaeroidea* Jord. & Fourr., *S. numidica* Jord. & Fourr., *S. insularis* Jord. & Fourr., *S. littoralis* Jord. & Fourr., and *S. anthericoides* (Poir.) Jord. & Fourr. (= *Scilla anthericoides* Poir.). More recently, Speta (l.c. 1998: 58) proposed the new name *Charybdis* Speta to replace *Squilla* Steinh., stating the latter to be an “orthographic variant” of both *Scilla* L. and “*Skilla* Raf.” (an orthographic variant of *Scilla* L.), but in effect treating *Squilla* as an illegitimate later homonym.

**Conclusion**

We are requesting a binding decision as to whether *Scilla* L. and *Squilla* Steinh. are to be treated as independent names or are sufficiently alike to be confused (under Art. 53.5 of the *ICN*, McNeill & al. in *Regnum Veg.* 154. 2012), and accordingly either orthographic variants with the current typification (under Art. 61.2) or treated as homonyms, if the conservation of *Scilla* with *S. bifolia* as type is approved (cf. Martínez-Azorín & Crespo, l.c.). In our opinion, Steinheil (1836) pointed out in the protologue the differences between the two names, which he applied deliberately to two very different groups of plants now considered to belong to two different subfamilies, *Hyacinthoideae* and *Urgineoideae* respectively. Furthermore, those two generic names show important orthographic differences that strongly affect their pronunciation and make them easy to differentiate and recognise.

As noted by Martínez-Azorín & Crespo (l.c.), *Charybdis* was superfluous when published, and is therefore illegitimate under

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Art. 52, as its type is the previously designated Rafinesque's type of *Scilla* L., a typification that was probably unknown to Speta (l.c., 1998: 58). This makes *Charybdis* not available for use.

Were our proposal to conserve *Scilla* with a conserved type (Martínez-Azorín & Crespo, l.c.) accepted, it would be the best choice to accept *Squilla* and *Scilla* as different names and thus *Squilla* would be available for the taxa currently included in the illegitimate *Charybdis*, thus avoiding the necessity to provide a new generic name for those plants (or propose *Charybdis* for conservation). This would not

be very disruptive, since most of the needed combinations in *Squilla* are already available.

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