Request for a binding decision on whether *Silene dicolor* Retz. and *S. discolor* Sm. (Caryophyllaceae) are sufficiently alike to be confused

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*Silene dicolor* Retz. (1803) [Angiosp.: Caryophyll.]

*Silene discolor* Sm. (1809) [Angiosp.: Caryophyll.]

*Silene dicolor* Retz.

*Silene dicolor* was described by Retzius (in Hoffmann, Phytogr. Bl.: 38. 1803). The species was characterized by a biennial habit, glabrous, decumbent stems, elongate and cylindrical calyx, opposite solitary and nodding flowers, a paniculate inflorescence, bifid, white to reddish petal limbs, and a three-locular capsule. This species has been treated as a synonym of *S. nutans* L. by Rohrbach (Monogr. Silene: 217. 1869), Richter (Pl. Eur. 2: 316. 1899), Rübel (in Bot. Jahrb. Syst. 47: 350. 1912), and Ascherson & Graebner (Syn. Mitteleur. Fl. 5(2): 204. 1921), but the name has apparently never been typified and we have not been able to locate any original material.

*S. discolor* Sm.

*Silene discolor* was described by Smith (Fl. Græc. Prod.: 1: 292. 1809). The species was characterized by diffuse stems, obovate leaves, a villous calyx, bifid petal limbs, which are flesh colored above (dorsal surface) and greenish below (ventral surface). The species was described from Cyprus; a Sibthorp collection at OXF appears to be original material and has been cited as the type (see: https://herbaria.plants.ox.ac.uk/bol/SIBTHORP/image/Sib-0981.JPG/Zoom). The species is included in floristic treatments of Crete (Turland & al., Fl. Cretan Area: 50. 1993), Cyprus (Meikle, Fl. Cyprus 1: 243. 1977), Europe (Chater & al. in Tutin & al., Fl. Eur., ed. 2, 1: 216. 1993; Euro+Med Plantbase, https://europlusmed.org/cdm_dataportal/taxon/d6610b67-2653-45f5-a1f3-f899e1a1f0d2, accessed 14 Apr 2022), Greece (Strid & Tan, Fl. Hellenica 1: 315. 1997 and Flora of Greece web https://portal.cybertaxonomy.org/flora-greece/edcdw_dataportal/taxon/a959cfd1-f89f-442d-afe9-0d683c1c6712, accessed 14 Apr 2022), southwestern Asia (Boissier, Fl. Orient. 1: 592–593. 1867), and Turkey (Coode & Cullen in Davis, Fl. Turkey: 2: 237. 1967).

**Discussion**

Although the epithet of Retzius’s species was clearly spelled as ‘dicolor’ in the protologue, the name has appeared as ‘discolor’ in the few botanical resources in which we have seen it cited, e.g., Roth, Catal. Bot. 3: 43. 1806; Dietrich, Vollst. Lex. Gärtn. 9: 212. 1809; Steudel, Nomencl. Bot. 1: 778. 1821, ed. 2: 584. 1841; Rohrbach, l.c.; Richter, l.c.; Rübel, l.c.; and Ascherson & Graebner, l.c. It is found in IPNI (http://www.ipni.org) as both *Silene dicolor* and *S. discolor*; both entries refer to the same citation of the Retzius publication. This changed orthography, i.e., ‘discolor’, makes it confusable with the name of Smith’s species. We believe that the original spelling ‘dicolor’ has no meaning. According to Retzius’s description,
the corolla of the taxon could be white to reddish. We think, therefore, that ‘bicolor’ could be another possible epithet for Retzius’s taxon. Did a typographic error occur in the publication of the protologue? Was it supposed to be ‘bicolor’ or ‘discolor’? Or, did Retzius intend ‘dicolor’ by combining a Greek prefix and a Latin adjective? Why has it been assumed to be ‘discolor’? Unfortunately, there is no evidence that we have found to answer these questions.

If Silene dicolor and S. discolor are indeed to be treated as homonyms, S. discolor Sm. would become a later homonym of S. discolor Retz. While S. discolor Sm. is recognized in most local floras (see above listing), recent monographs (e.g., Chowdhuri in Notes Roy. Bot. Gard. Edinburgh 22: 250. 1957) and treatments of Silene (e.g., Greuter in Taxon 44: 575. 1995), following the “POWO” link in IPNI leads to a page showing that S. discolor Sm. is a synonym of S. pompeipolitana J. Gay ex Boiss. (https://powo.science.kew.org/taxon/157242-1, accessed 14 Apr 2022). We disagree with this assessment; although similar in habit, the two taxa can be distinguished on leaf shape, pedicel length, corolla color, and seed shape; see Coode & Cullen, l.c.: 238; Rohrbach, l.c.: 110; Williams in J. Linn. Soc., Bot. 32: 96. 1896.

Conclusion
We are requesting a binding decision under Art. 53.4 of the ICN (Turland & al. in Regnum Veg. 159. 2018) as to whether Silene dicolor Retz. and S. discolor Sm. are sufficiently alike to be confused and thus should be treated as homonyms. If there is a decision to treat the names as homonyms, S. discolor Sm. would be a later homonym of S. di[s]color Retz. Since S. di[s]color Retz. has mainly appeared as a synonym of S. nutans, has never been typified, and is not in current usage, we would propose, for the purpose of nomenclatural stability of the current usage of S. discolor Sm., to conserve that name against its earlier homonym S. discolor Retz. (‘dicolor’) under Art. 14 of the ICN.

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