

Validation of Subclass and Superordinal Names in Magnoliophyta

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ABSTRACT. Three subclass and 40 superordinal names now in current use, but not validly published, are validated.

In recent years, several authors have adopted subclass and superordinal names in Magnoliophyta, the flowering plants (Cronquist, 1981; R. Dahlgren, 1980; Dahlgren & Clifford, 1981, 1982; Dahlgren & Bremer, 1985; Dahlgren et al., 1985; G. Dahlgren, 1989a, b; Takhtajan, 1959, 1966, 1969, 1970, 1973, 1980, 1986, 1987; Thorne, 1968, 1976, 1981, 1983, 1992). Unfortunately, except for those proposed by Takhtajan in 1966, almost none have been validly published in accordance with provisions in the *International Code of Botanical Nomenclature* (Greuter et al., 1988). Although the principle of priority is not mandatory for names above the rank of family (Art. 11.4), all names regardless of rank must be effectively and validly published (Art. 6).

All subclass and superordinal names not validly published, but now in current use, are validated below with the exception of two superordinal names (based on Annonaceae and Chenopodiaceae) used by Thorne (1992), for which the validly published Magnolianae Takhtajan (1966) and Caryophyllanae Takhtajan (1966) are available, and a subclass name based on Cornaceae used by Frohne & Jensen (1985). The latter has not been adopted by Cronquist or Takhtajan.

All names proposed here are based on and automatically typified by the type of the genus of an included family name (Art. 16.1) and validated by a direct reference to a validly published description (Art. 32). The terminations are in accordance with those given in Article 16.2 and Recommendation 16A. The rationale for the termination “-anae” for superorders has been discussed elsewhere (Reveal & Bedell, 1983) and is now uniformly adopted by the major workers who use the rank (Takhtajan, 1987; Thorne, 1992).

All proposed new names are currently accepted by Dahlgren (in G. Dahlgren, 1989a, b), Takhtajan (1987), or Thorne (1992). Authors adopting these names are noted by the use of D, T, or Th respectively.

Subclass **Lamiidae** (Lindley) Takhtajan ex Reveal, stat. nov. Based on Lamiaceae Lindley, Nat. Syst. Bot. ed. 2, 275. 1836. TYPE: *Lamium* Linnaeus (1753). T.

Subclass **Ranunculidae** (A. L. de Jussieu) Takhtajan ex Reveal, stat. nov. Based on Ranunculaceae A. L. de Jussieu, Gen. Pl. 231. 1789. TYPE: *Ranunculus* Linnaeus (1753). T.

Subclass **Triurididae** (G. Gardner) Takhtajan ex Reveal, stat. nov. Based on Triuridaceae G. Gardner, Trans. Linn. Soc. 19: 160. 1843. TYPE: *Triuris* Miers (1841). T.

Superorder **Aranae** (A. L. de Jussieu) Thorne ex Reveal, stat. nov. Based on Araceae A. L. de Jussieu, Gen. Pl. 23. 1789. TYPE: *Arum* Linnaeus (1753). D, T, Th.

Superorder **Balanophoranae** (L. C. Richard & A. Richard) R. Dahlgren ex Reveal, stat. nov. Based on Balanophoraceae L. C. Richard & A. Richard, Mém. Mus. Hist. Nat. 8: 429. 1822. TYPE: *Balanophora* J. R. & G. Forster (1775). D.

Superorder **Bromelianae** (A. L. de Jussieu) R. Dahlgren ex Reveal, stat. nov. Based on Bromeliaceae A. L. de Jussieu, Gen. Pl. 49. 1789. TYPE: *Bromelia* Linnaeus (1753). D, T.

Superorder **Butomanae** (L. C. Richard) Takhtajan ex Reveal, stat. nov. Based on Butomaceae L. C. Richard, Mém. Mus. Hist. Nat. 1: 366. 1815. TYPE: *Butomus* Linnaeus (1753). T.

Superorder **Campanulanae** (A. L. de Jussieu) Takhtajan ex Reveal, stat. nov. Based on Campanulaceae A. L. de Jussieu, Gen. Pl. 163. 1789. TYPE: *Campanula* Linnaeus (1753). T.

Superorder **Cornanae** (Dumortier) Thorne ex Reveal, stat. nov. Based on Cornaceae Dumortier, Anal. Fam. Pl. 33, 34. 1829. TYPE: *Cornus* Linnaeus (1753). D, T, Th.

Superorder **Cyclanthanae** (Dumortier) Thorne ex Reveal, stat. nov. Based on Cyclanthaceae Dumortier, Anal. Fam. Pl. 65, 66. 1829. TYPE: *Cyclanthus* P. A. Poiteau ex A. Richard (1824). D, T, Th.

Superorder **Eucommianae** (Engler) Takhtajan ex Reveal, stat. nov. Based on Eucommiaceae En-

- gler, Syllabus ed. 6, 145. 1909. TYPE: *Eucommia* D. Oliver (1890). T.
- Superorder **Euphorbianae** (A. L. de Jussieu) Takhtajan ex Reveal, stat. nov. Based on Euphorbiaceae A. L. de Jussieu, Gen. Pl. 384. 1789. TYPE: *Euphorbia* Linnaeus (1753). T.
- Superorder **Fabanae** (Lindley) R. Dahlgren ex Reveal, stat. nov. Based on Fabaceae Lindley, Nat. Syst. Bot. ed. 2, 148. 1836. TYPE: *Faba* J. Hill (1753). T.
- Superorder **Gentiananae** (A. L. de Jussieu) Thorne ex Reveal, stat. nov. Based on Gentianaceae A. L. de Jussieu, Gen. Pl. 141. 1789. TYPE: *Gentiana* Linnaeus (1753). D, T, Th.
- Superorder **Geranianae** (A. L. de Jussieu) Thorne ex Reveal, stat. nov. Based on Geraniaceae A. L. de Jussieu, Gen. Pl. 268. 1789. TYPE: *Gentiana* Linnaeus (1753). Th.
- Superorder **Hydatellanae** (Hamann) Takhtajan ex Reveal, stat. nov. Based on Hydatellaceae Hamann, New Zealand J. Bot. 14: 195. 1976. TYPE: *Hydatella* Diels (1904). T, Th.
- Superorder **Juglandanae** (A. Richard ex Kunth) Takhtajan ex Reveal, stat. nov. Based on Juglandaceae A. Richard ex Kunth, Ann. Sci. Nat. (Paris) 2: 343. 1824. TYPE: *Juglans* Linnaeus (1753). T.
- Superorder **Lecythidanae** (P. A. Poiteau) Takhtajan ex Reveal, stat. nov. Based on Lecythidaceae P. A. Poiteau, Mém. Mus. Hist. Nat. 13: 143. 1845. TYPE: *Lecythis* Loefling (1758). T.
- Superorder **Loasanae** (Dumortier) R. Dahlgren ex Reveal, stat. nov. Based on Loasaceae Dumortier, Comment. Bot. 58. 1822. TYPE: *Loasa* Adanson (1763). D, T, Th.
- Superorder **Najadanae** (A. L. de Jussieu) Takhtajan ex Reveal, stat. nov. Based on Najadaceae A. L. de Jussieu, Gen. Pl. 18. 1789. TYPE: *Najas* Linnaeus (1753). T.
- Superorder **Nelumbonanae** (Dumortier) Takhtajan ex Reveal, stat. nov. Based on Nelumbonaceae Dumortier, Anal. Fam. Pl. 20, 24. 1829. TYPE: *Nelumbo* Adanson (1763). T.
- Superorder **Nepenthanae** (Dumortier) Takhtajan ex Reveal, stat. nov. Based on Nepenthaceae Dumortier, Anal. Fam. Pl. 14, 16. 1829. TYPE: *Nepenthes* Linnaeus (1753). T.
- Superorder **Nymphaeanae** (R. A. Salisbury) Thorne ex Reveal, stat. nov. Based on Nymphaeaceae R. A. Salisbury, Ann. Bot. (König & Sims) 2: 70. 1805. TYPE: *Nymphaea* Linnaeus, nom. cons. (1753). D, T, Th.
- Superorder **Pandananae** (R. Brown) Thorne ex Reveal, stat. nov. Based on Pandanaceae R. Brown, Prodr. 340. 1810. TYPE: *Pandanus* Linnaeus (1753). D, T, Th.
- Superorder **Plumbaginanae** (A. L. de Jussieu) Takhtajan ex Reveal, stat. nov. Based on Plumbaginaceae A. L. de Jussieu, Gen. Pl. 92. 1789. TYPE: *Plumbago* Linnaeus (1753). D, T.
- Superorder **Podostemonanae** (L. C. Richard ex C. A. Agardh) R. Dahlgren ex Reveal, stat. nov. Based on Podostemonaceae L. C. Richard ex C. A. Agardh, Aphor. Bot. 125. 1822. TYPE: *Podostemon* Michaux (1803).
- Superorder **Polygonanae** (A. L. de Jussieu) Takhtajan ex Reveal, stat. nov. Based on Polygonaceae A. L. de Jussieu, Gen. Pl. 82. 1789. TYPE: *Polygonum* Linnaeus (1753). D, T.
- Superorder **Pontederianae** (Kunth) Takhtajan ex Reveal, stat. nov. Based on Pontederiaceae Kunth in Humboldt, Bonpland & Kunth, Nov. Gen. Sp. 1: ed. fol. 211; ed. qu. 265. 1816. TYPE: *Pontederia* Linnaeus (1753). T.
- Superorder **Primulanae** (Ventenat) R. Dahlgren ex Reveal, stat. nov. Based on Primulaceae Ventenat, Règne Vég. 2: 285. 1799. TYPE: *Primula* Linnaeus (1753). D.
- Superorder **Rafflesianae** (Dumortier) Thorne ex Reveal, stat. nov. Based on Rafflesiaceae Dumortier, Anal. Fam. Pl. 13, 14. 1829. TYPE: *Rafflesia* R. Brown (1821). T, Th.
- Superorder **Ranunculanae** (A. L. de Jussieu) Takhtajan ex Reveal, stat. nov. Based on Ranunculaceae A. L. de Jussieu, Gen. Pl. 231. 1789. TYPE: *Ranunculus* Linnaeus (1753). D, T.
- Superorder **Rhamnanae** (A. L. de Jussieu) Takhtajan ex Reveal, stat. nov. Based on Rhamnaceae A. L. de Jussieu, Gen. Pl. 376. 1789. TYPE: *Rhamnus* Linnaeus (1753). T.
- Superorder **Santalanae** (R. Brown) Thorne ex Reveal, stat. nov. Based on Santalaceae R. Brown, Prodr. 350. 1810. TYPE: *Santalum* Linnaeus (1753). D, Th.
- Superorder **Sarracenianae** (Dumortier) Thorne ex Reveal, stat. nov. Based on Sarraceniaceae Dumortier, Anal. Fam. Pl. 53. 1829. TYPE: *Sarracenia* Linnaeus (1753). T.
- Superorder **Solananae** (A. L. de Jussieu) R. Dahlgren ex Reveal, stat. nov. Based on Solanaceae A. L. de Jussieu, Gen. Pl. 124. 1789. TYPE: *Solanum* Linnaeus (1753). D, T, Th.
- Superorder **Theanae** (D. Don) Thorne ex Reveal, stat. nov. Based on Theaceae D. Don, Prodr. Fl. Nepal. 224. 1825. TYPE: *Thea* Linnaeus (1753). D, T, Th.
- Superorder **Triuridanae** (G. Gardner) Thorne ex Reveal, stat. nov. Based on Triuridaceae G.

- Gardner, Trans. Linn. Soc. 19: 160. 1843.
TYPE: *Triuris* Miers (1841). D, T, Th.
- Superorder **Trochodendranæ** (Prantl) Takhtajan
ex Reveal, stat. nov. Based on Trochodendra-
ceae Prantl in Engler & Prantl, Nat. Pflanzen-
fam. III, 2: 21. 1888. TYPE: *Trochodendron*
Zuccarini (1839). T.
- Superorder **Typhanae** (A. L. de Jussieu) Thorne
ex Reveal, stat. nov. Based on Typhaceae A.
L. de Jussieu, Gen. Pl. 25. 1789. TYPE: *Typha*
Linnaeus (1753). T.
- Superorder **Urticanae** (A. L. de Jussieu) Takhtajan
ex Reveal, stat. nov. Based on Urticaceae A.
L. de Jussieu, Gen. Pl. 400. 1789. TYPE:
Urtica Linnaeus (1753). T.
- Superorder **Violanae** (Batsch) R. Dahlgren ex Re-
veal, stat. nov. Based on Violaceae Batsch, Tab.
Affin. Regni Veg. 57. 1802. TYPE: *Viola* Lin-
naeus (1753). D, T, Th.
- Superorder **Vitanae** (A. L. de Jussieu) Takhtajan
ex Reveal, stat. nov. Based on Vitaceae A. L.
de Jussieu, Gen. Pl. 267. 1789. TYPE: *Vitis*
Linnaeus (1753). D, T.
- Superorder **Zingiberanae** (Lindley) Takhtajan ex
Reveal, stat. nov. Based on Zingiberaceae Lin-
dley, Key Bot. 69. 1835. TYPE: *Zingiber* G.
R. Boehmer, nom. cons. (1760). D, T.
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