

Suprageneric nomenclature in the *Caryophyllaceae*

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Summary

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All known suprageneric names within the *Caryophyllaceae* are listed.

Through our work on the nomenclature of the *Caryophyllaceae* in preparing our treatments for the *Generic flora of the southeastern United States* (Rabeler, in prep.) and for *The families and genera of the vascular plants* (Bittrich, in prep.) we uncovered a number of problems involving the suprageneric names being used in the *Caryophyllaceae*. Given the increased interest in higher-level relationships in the Caryophyllidae that has arisen from the application of molecular (e.g., Giannasi & al., 1992) and cladistic methods (e.g., Rodman & al., 1984; Rodman, 1990; Hershkovitz, 1991) and from questions about relationships within the *Caryophyllaceae* (e.g., Gilbert, 1987; Hershkovitz, 1991), we feel that it is appropriate to present an overview of validly published suprageneric names.

Names of subdivisions and segregates of the *Caryophyllaceae*

We follow the format of Nicolson (1984) and Sanders & Cantino (1984), listing the available names (known to us) under the generic name providing their type. We likewise follow Nicolson (1984) in extending Art. 18.2 of the current *Code* (Greuter & al., 1988) to allow substitution of “subfamily” for “subordo”, an extension that has just been approved by the XV International Botanical Congress (McNeill, 1993). Authorship for two commonly used subfamily names was changed under this convention. Use of parenthetical authors follows Nicolson (1984). Two other provisions of the *Code* were invoked frequently during the construction of this compilation, namely Art. 19.6 (allowing correction of incorrect terminations) and the combination of Art. 19.1-3 and 32.1(b) (names with the prefix with *Eu-* are invalidly published).

We follow Art. 19.3 of the *Code*, as recently amended (McNeill, 1993), in forming obligatory names (formerly: autonyms) for names of family subdivisions that include the type of the family name, *Caryophyllus* Miller (\equiv *Dianthus* L.). These had never been formally validated to the best of our knowledge, and are validated here by reference to the Latin description validating the family name *Caryophyllaceae* (see Art. 41.1 as modified by the XV IBC). The proposal to amend Art. 18.3 to allow use of “autonyms” subordinate to a conserved family name (Gilbert & Bittrich, 1991) having been accepted, names based on *Dianthus* in these ranks, as used by Sourková (1978), are now invalid. These names are nevertheless included in our listing, along with other names not so far validly published, for all of which square brackets are used.

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Unranked names (Art. 35) are given in those cases in which a reference to them has served to validate later names in definite ranks (as shown by parenthetical author citation).

Acanthophyllum C. Mey.

Subtribe *Acanthophyllinae* Sourk. in Preslia 50: 150. 1978.

Alsine L.

Fam. *Alsinaceae* (DC.) Bartl. in Bartling & Wendland, Beitr. Bot. 2: 159. 1825, '*Alsineae*', *nom. cons.*

Subfam. *Alsinoideae* Fenzl in Endlicher, Gen. Pl.: 963. 1840, 'subordo *Alsineae*'.

Tribe *Alsineae* (DC.) Ser. in Candolle, Prodr. 1: 388. 1824.

[Unranked] *Alsineae* DC. in Lamarck & Candolle, Fl. France, ed. 3, 4(2): 766. 1815.

Alsinidendron H. Mann

[Tribe *Alsinidendreae* Rohw. in Bot. Jahrb. Syst. 90: 202. 1970, '*Alsinodendreae*', *nom. nud.*]

Arenaria L.

Tribe *Arenarieae* Rohrb. in Martius, Fl. Brasil 14(2): 262. 1872.

Subtribe *Arenariinae* Dumort., Fl. Belg.: 109. 1827, '*Arenarieae*'.

Caryophyllus Mill., non L. (\equiv *Dianthus*)

Fam. *Caryophyllaceae* Juss., Gen. Pl.: 299. 1789, *nom. cons.*

Subfam. *Caryophylloideae* (Juss.) Rabeler & Bittrich, *stat. nov.*

Tribe *Caryophylleae* (Juss.) Rabeler & Bittrich, *stat. nov.*

Subtribe *Caryophyllinae* (Juss.) Rabeler & Bittrich, *stat. nov.*

Cerastium L.

Subfam. *Cerastioideae* Hayek, Fl. Steiermark 1: 270. 1908.

Subtribe *Cerastiinae* Dumort., Fl. Belg.: 108. 1827, '*Cerastieae*'.

Cometes L.

Tribe *Cometeae* Meisn., Pl. Vasc. Gen. 1: 133; 2: 97. 1838.

Corrigiola L.

Fam. *Corrigiolaceae* (Dumort.) Dumort., Anal. Fam. Pl.: 49. 1829.

Tribe *Corrigioleae* Dumort., Fl. Belg.: 86. 1827.

Subtribe *Corrigiolinae* Fenzl in Endlicher, Gen. Pl.: 956. 1839, '*Corrigioleae*'.

Cucubalus L.

[Subfam. *Cucubaloideae* Leonhardt in Österr. Bot. Z. 98: 12. 1951, *nom. nud.*]

Subtribe *Cucubalinae* Pax in Bot. Jahrb. Syst. 61: 232. 1927.

Dianthus L.

[Fam. *Dianthaceae* Drude in Schenk, Handb. Bot. 3(2): 395. 1886, *nom. inval.* (Art. 18.3, 19.3 and 32.1(b))].

[Subfam. *Dianthoideae* Sourk. in Preslia 50: 148. 1978, *nom. inval.* (Art. 18.3, 19.3 and 32.1(b))].

[Tribe *Diantheae* Dumort. Anal. Fam. Pl.: 49. 1829, *nom. inval.* (Art. 18.3, 19.3 and 32.1(b))].

[Subtribe *Dianthinae* Sourk. in Preslia 50: 148. 1978, *nom. inval.* (Art. 18.3, 19.3 and 32.1(b))]

Drymaria Willd. ex Schult.[Tribe *Drymarieae* F. Williams in J. Linn. Soc., Bot. 32: 22. 1896, nom. nud.][Unranked *Drymarieae* Small, Man. S.E. Fl.: 496. 1933, nom. nud.]*Drypis* L.[Subfam. *Drypidoideae* Leonhardt in Österr. Bot. Z. 98: 12. 1951, nom. nud.]Tribe *Drypideae* Fenzl in Endlicher, Gen. Pl.: 974. 1840.Subtribe *Drypidinae* Pax in Bot. Jahrb. Syst. 61: 232. 1927.*Geocarpon* MackenzieTribe *Geocarpeae* E. J. Palmer & Steyerm. in Bull. Torrey Bot. Club 77: 272. 1950.*Gypsophila* L.Subtribe *Gypsophilinae* Sourk. in Preslia 50: 149. 1978.*Habrosia* Fenzl[Subfam. *Habrosioideae* Leonhardt in Österr. Bot. Z. 98: 4. 1951, nom. nud.]Tribe *Habrosieae* Pax in Bot. Jahrb. Syst. 61: 231. 1927.Subtribe *Habrosiinae* Fenzl in Bot. Zeitung (Berlin) 1843: 326. 1843, '*Habrosieae*'.*Herniaria* L.Subfam. *Herniarioideae* Rouy, Fl. France 12: 2. 1910, '*Herniarineae*'.*Honckenya* Ehrh.Tribe *Honkenyeae* Kozh. in Budancev, Vopr. Sravnit. Morf. Semen. Rast.: 124. 1975.*Illecebrum* L.Fam. *Illecebraceae* R. Br., Prodr.: 413. 1810, '*Illecebreae*', nom. cons.Subfam. *Illecebroideae* (R. Br.) Rossb. in Martius, Fl. Brasil. 14(2): 247. 1872, '*Illecebreae*'.Tribe *Illecebreae* DC., Prodr. 3: 367. 1828.Subtribe *Illecebrinae* (R. Br.) Graebn. in Ascherson & Graebner, Syn. Mitteleur. Fl. 5(1): 870. 1919.*Loeflingia* L.Subtribe *Loeflingiinae* Fenzl in Endlicher, Gen. Pl.: 960. 1839, '*Loeflingieae*'.*Lychnis* L.Tribe *Lychnideae* Fenzl in Endlicher, Gen. Pl.: 971. 1840.[Subtribe *Lychnidinae* Janchen in Österr. Bot. Z. 102: 386. 1955, nom. nud.; Cat. Fl. Austriae: 143. 1956, nom. nud.]*Malachium* Fr. ex Reichb. 1832, nom. illeg. (≡ *Myosoton* Moench 1794)[Subtribe *Malachiinae* Fenzl in Endlicher, Gen. Pl.: 970. 1840, '*Malachieae*', nom. inval. (Art. 19.1-3 and 32.1(b))]*Merckia* Fischer ex Cham. & Schldl. 1826, non *Merckia* Borkh. 1792 (≡ *Wilhelmsia* Reichb.)[Tribe *Merckieae* Fenzl in Endlicher, Gen. Pl.: 966. 1840, nom. inval. (Art. 18.1 and 32.1(b))].*Minuartia* L.Tribe *Minuartieae* DC., Prodr. 3: 379. 1828, '*Minuartiae*'.

Ortegia L.

[Tribe *Ortegieae* Baptista, Discuss. Carac. Distinct. Fam. Paronych.: 12. 1855, 'Ortegias', nom. inval. (Art. 18 Ex. 6, 19.6 and 32.1(b))].

Paronychia Hill

Fam. *Paronychiaceae* Juss. in Mém. Mus. Hist. Nat. 2: 386. 1816, '*Paronychieae*'.
Subfam. *Paronychioideae* Meisn., Pl. Vasc. Gen. 1: 132; 2: 96. 1838, 'subordo *Paronychieae*'.

Tribe *Paronychieae* Dumort., Fl. Belg.: 86. 1827.

Subtribe *Paronychiinae* Pax in Bot. Jahrb. Syst. 61: 231. 1927.

Plettkea Mattf.

[Tribe *Plettkeae* Leonhardt in Österr. Bot. Z. 98: 5. 1951, '*Plettkeae*', nom. nud.]

Subtribe *Plettkeinae* Mattf. in Engler & Prantl, Nat. Pflanzenfam., ed. 2, 16c: 367. 1934.

Pollichia Aiton

Tribe *Pollichieae* DC., Prodr. 3: 377. 1828.

Subtribe *Pollichiiinae* Pax in Bot. Jahrb. Syst. 61: 231. 1927.

Polycarpha Lam.

Subfam. *Polycarpoideae* Tanf. in Parlatore, Fl. Ital. 9: 623. 1892, '*Polycarpineae*'.

Tribe *Polycarphae* DC., Prodr. 3: 373. 1828.

Pteranthus Forssk.

Subfam. *Pteranthoideae* Luders in Bot. Jahrb. Syst. 40, Beibl. 91: 29. 1907.

Tribe *Pterantheae* R. Br. ex Fenzl in Endlicher, Gen. Pl.: 959. 1839.

Pycnophyllum Skottsbo.

Tribe *Pycnophylleae* Mattf. in Repert. Spec. Nov. Regni Veg. 18: 167. 1922.

Queria L. (= *Minuartia* L.)

Tribe *Querieae* DC., Prodr. 3: 379. 1828. '*Queriaceae*'

Sabulina Rchb. (= *Minuartia* L.)

Tribe *Sabulineae* Fenzl in Endlicher, Gen. Pl.: 963. 1840.

Subtribe *Sabulininae* (Fenzl) Graebn. in Ascherson & Graebner, Syn. Mitteleur. Fl. 5(1): 448. 1915.

Sagina L.

Tribe *Sagineae* Caruel in Parlatore, Fl. Ital. 9: 564. 1892.

Subtribe *Saginininae* Fenzl in Endlicher, Gen. Pl.: 963. 1840, '*Sagineae*'.

Saponaria L.

Tribe *Saponarieae* Neum. in Verh. Zool.-Bot. Ges. Wien 72: 53. 1921.

[Subtribe *Saponariinae* Janchen in Österr. Bot. Z. 102: 385. 1955, nom. nud.; Cat. Fl. Austriae: 143. 1956, nom. nud.]

Schischkiniella Steenis

Subtribe *Schischkiniellinae* Ikonn. in Novosti Sist. Vysš Rast. 14: 75. 1977.

Scleranthus L.

Fam. *Scleranthaceae* (A. St.-Hil.) Bartl. in Bartling & Wendland, Beitr. Bot. 2: 153. 1825, '*Scleranthae*'.

Subfam. *Scleranthoideae* Meisn., Pl. Vasc. Gen. 1: 133; 2: 97. 1838, 'subordo *Scleranthae*'.

Tribe *Scleranthae* DC., Prodr. 3: 377. 1828.

Subtribe *Scleranthinae* Mattf. in Engler & Prantl, Nat. Pflanzenfam., ed. 2, 16c: 367. 1934.

[Unranked] *Scleranthae* A. St.-Hil. in Bull. Sci. Soc. Philom. Paris 1815: 38. 1815.

Silene L.

Fam. *Silenaceae* (Ser.) Bartl. in Bartling & Wendland, Beitr. Bot. 2: 160. 1825, '*Sileneae*'.

Subfam. *Silenoideae* Fenzl in Endlicher, Gen. Pl.: 970. 1840, 'subordo *Sileneae*'.

Tribe *Sileneae* DC. ex Ser. in Candolle, Prodr. 1: 351. 1824.

Subtribe *Sileninae* F. Williams in J. Linn. Soc., Bot. 32: 4. 1896, '*Silenoideae*'.

Spergula L.

Tribe *Sperguleae* Dumort. in Anal. Fam. Pl.: 49. 1829.

Subtribe *Spergulinae* Dumort., Fl. Belg.: 110. 1827, '*Sperguleae*'.

Spergularia (Pers.) J. Presl & C. Presl.

Tribe *Spergularieae* Willk. in Willkomm & Lange, Prodr. Fl. Hispan. 3: 161. 1874.

Sphaerocoma T. Anderson

Tribe *Sphaerocomeae* Boiss., Fl. Orient. 1: 738. 1867.

Stellaria L.

Fam. *Stellariaceae* Dumort., Fl. Belg.: 106. 1827.

Tribe *Stellarieae* Fenzl in Endlicher, Gen. Pl.: 966. 1840, '*Stellarineae*'.

Subtribe *Stellariinae* (Fenzl) Graebn. in Ascherson & Graebner, Syn. Mitteleur. Fl. 5(1): 448. 1915.

Telephium L.

Fam. *Telephiaceae* Link, Handb. 2: 45. 1831.

Subfam. *Telephioideae* Tanf. in Parlatores, Fl. Ital. 9: 629. 1893, '*Telephineae*'.

Tribe *Telephieae* DC., Prodr. 3: 366. 1828.

Subtribe *Telephiinae* (Bartl.) Graebn. in Ascherson & Graebner, Syn. Mitteleur. Fl. 5(1): 854. 1919.

[Unranked] *Telephieae* Bartl. in Bartling & Wendland, Beitr. Bot. 2: 158. 1825.

Xerotia Oliver

Tribe *Xerotieae* Pax in Bot. Jahrb. Syst. 61: 231. 1927.

Pax & Hoffmann's subdivisions of the Caryophyllaceae and their correct names

The treatment of the *Caryophyllaceae* by Pax & Hoffmann (1934), modified slightly by Mattfeld (1934), remains the most widely used classification scheme, although many of their tribe and subtribe names are rarely used in recent literature. Leonhardt (1951) and Janchen (1955, 1956) proposed revised schemes, but both include several names that are not validly published. Table 1 illustrates the schemes of Pax & Hoffmann (1934) and the Mattfeld (1934) modifications (entries in curly brackets), both as published and as correct under the current rules. We wish to emphasize that this is given as an example; as Hershkovitz (1991) implies, future work may significantly modify the relationships that Pax & Hoffmann postulated.

Table 1. Names of taxa accepted in the classification of Pax & Hoffmann (1934), both as accepted there (left) and as currently correct (right). Names in curly brackets are either additional, or meant to replace the name immediately preceding them, in Mattfeld's *Nachtrag* to Pax & Hoffmann. An asterisk (*) indicates names that are incorrect or invalid.

As published:	Correct:
<i>Paronychioideae</i> Vierh.	<i>Paronychioideae</i> Meisn.
<i>Paronychieae</i> Pax	<i>Paronychieae</i> Dumort.
<i>Paronychiinae</i> Pax & K. Hoffm.	<i>Paronychiinae</i> Pax
<i>Pollichinae</i> Pax & K. Hoffm.	<i>Pollichinae</i> Pax
<i>Illecebrinae</i> Asch. & Graebn.	<i>Illecebrinae</i> (R. Br.) Graebn.
* <i>Pterantheae</i> Fenzl	<i>Cometeae</i> Meisn.
<i>Polycarpeae</i> Pax	<i>Polycarpeae</i> DC.
<i>Sperguleae</i> Vierh.	<i>Sperguleae</i> Dumort.
<i>Spergulinae</i> Pax & K. Hoffm.	<i>Spergulinae</i> Dumort.
<i>Telephiinae</i> Asch. & Graebn.	<i>Telephiinae</i> (Bartl.) Graebn.
<i>Xerotieae</i> Pax & K. Hoffm.	<i>Xerotieae</i> Pax
<i>Alsinoideae</i> Vierh.	<i>Alsinoideae</i> Fenzl
<i>Alsineae</i> Pax	<i>Alsineae</i> DC.
* <i>Stellariinae</i> Asch. & Graebn.	<i>Arenariinae</i> Dumort.
* <i>Sabulininae</i> Asch. & Graebn.	<i>Saginatae</i> Fenzl
<i>Habrosieae</i> Pax & K. Hoffm.	<i>Habrosieae</i> Pax
{ <i>Habrosiinae</i> Mattf.}	{ <i>Habrosiinae</i> Fenzl}
<i>Sclerantheae</i> Vierh.	<i>Sclerantheae</i> DC.
{ <i>Scleranthinae</i> Mattf.}	{ <i>Scleranthinae</i> Mattf.}
{ <i>Plettkeinae</i> Mattf.}	{ <i>Plettkeinae</i> Mattf.}
<i>Pycnophylleae</i> Mattf.	<i>Pycnophylleae</i> Mattf.
* <i>Silenoideae</i> A. Br.	<i>Caryophylloideae</i>
* <i>Lychnideae</i> Fenzl	<i>Sileneae</i> Dumort.
<i>Sileninae</i> Pax & K. Hoffm.	<i>Sileninae</i> F. Williams
<i>Cucubalinae</i> Pax & K. Hoffm.	<i>Cucubalinae</i> Pax
<i>Drypidinae</i> Pax & K. Hoffm.	<i>Drypidinae</i> Pax
* <i>Diantheae</i> Pax	<i>Caryophylleae</i>

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Postscript: Shortly after work on this paper was completed, Reveal (1993: 207) made reference to nine caryophyllid family names not seen by us or with information differing from ours: *Cerastiaceae* Vest 1818, *Dianthaceae* Vest 1818, *Herniariaceae* Martinov, 1820; *Ortegaceae* Martinov, 1820; *Paronychiaceae* Juss., 1815; *Sagina-ceae* Spreng. ex Weinm., 1824; *Scleranthaceae* Bercht. & J. Presl, 1820; *Stellariaceae* Dumort., 1822; and *Telephiaceae* Martinov, 1820.