

Dichodon parvipetalum, a new combination for the Chinese Caryophyllaceae

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Abstract

The generic name *Dichodon* (Bartl. ex Rchb.) Rchb. was previously reinstated based on results from recent molecular phylogenetic studies. Accordingly, *Dichodon parvipetalum* (Hosok.) G. Yao, a new combination for the species *Cerastium parvipetalum* Hosok. is proposed.

Keywords

Caryophyllaceae, *Cerastium*, *Dichodon*, *Dichodon parvipetalum*, China

Introduction

The genus *Cerastium* L. in the broad sense consists of nearly 100 species mainly distributed in temperate and cold regions, with 23 species occurring in China (Lu and Morton 2001). Traditionally, the genus was subdivided into two subgenera: *Cerastium* (characterized by five carpels, five styles and ten capsule teeth) and *Dichodon* (Bartl. ex Rchb.) Boiss. (characterized by three carpels, three styles and six capsule teeth) (Schischkin 1970). In a recent molecular phylogenetic study (Greenberg and Donoghue 2011), the subgenus *Cerastium* was supported as the sister-group of *Moenchia* Ehrhart., a clade with four styles and eight capsule teeth, while the other subgenus *Dichodon* was sister to *Holosteum* L., which has three styles and six capsule teeth. Based on these results, Hernández-Ledesma et al. (2015) accepted the subgenus *Dichodon* at

the generic level and reinstated it as *Dichodon* (Bartl. ex Rchb.) Rchb. in their comprehensive taxonomic study of Caryophyllales. In the *Flora of China*, two species (viz. *Cerastium cerastoides* (L.) Britton and *C. parvipetalum* Hosok.) belonging to the subgenus *Dichodon* were accepted (Lu and Morton 2001). The former species has already been transferred to *Dichodon* (*Dichodon cerastoides* (L.) Rchb.) by Reichenbach (1841), while the other species, endemic in Taiwan, has not been formally transferred to *Dichodon*. Accordingly, the new combination *Dichodon parvipetalum* is proposed below.

New combination

***Dichodon parvipetalum* (Hosok.) G. Yao, comb. nov.**
urn:lsid:ipni.org:names:60473146-2

Basionym. *Cerastium parvipetalum* Hosok., Trans. Nat. Hist. Soc. Taiwan 22: 227. 1932. TYPE: CHINA. Taiwan, Kaohsiung, 3 Jan. 1931, T. Hosokawa 93 (Holotype: TAI!, no.116065)

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References

- Greenberg AK, Donoghue MJ (2011) Molecular systematics and character evolution in Caryophyllaceae. *Taxon* 60(6): 1637–1652.
- Hernández-Ledesma P, Berendsohn WG, Borsch T, Mering SV, Akhani H, Arias S, Castañeda-Noa I, Eggli U, Eriksson R, Flores-Olvera H, Fuentes-Bazán S, Kadereit G, Klak C, Korotkova N, Nyffeler R, Ocampo G, Ochoterena H, Oxelman B, Rabeler RK, Sanchez A, Schlumpberger BO, Uutila P (2015) A taxonomic backbone for the global synthesis of species diversity in the angiosperm order Caryophyllales. *Willdenowia* 45(3): 281–383. doi: 10.3372/wi.45.45301
- Lu DQ, Morton JK (2001) *Cerastium*. In: Wu ZY, Raven PH (Eds) *Flora of China* 6. Science Press & Missouri Botanical Garden Press, Beijing & St. Louis, 31–37.
- Reichenbach HGL (1841) *Icones florae Germanicae et Helveticae: simul Pedemontanae, Tyrolensis, Istriacae, Dalmaticae, Austriacae, Hungaricae, Transylvanicae, Moravicae, Boressicae, Holisticae, Belgicae, Hollandicae, etgo Mediale Europae*, vol. 5. Ambrosi Abel, Lipsiae, 38 pp.
- Schischkin BK (1970) *Cerastium*. In: VL Komarov, BK Schischkin (Eds) *Flora of the USSR* 6. Israel Program for Scientific Translation, Jerusalem, 330–359.