



Valid publication of the name *Eriobotrya* × *daduheensis* (Malinae, Rosaceae)

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Abstract

“*Eriobotrya prinoides* Rehd. et Wils. var. *daduheensis* H. Z. Zhang” was not validly published by Zhang *et al.* because there was no Latin diagnosis or description and no specimen was indicated as type. Recent studies showed that it was a hybrid between *Eriobotrya japonica* and *E. prinoides*. “*Eriobotrya* × *daduheensis* (H. Z. Zhang) B. Tang” was proposed, but it was a *nomen nudum*. *Eriobotrya* × *daduheensis* H. Z. Zhang ex W. B. Liao, Q. Fan et M. Y. Ding is validated by giving a full description and designating the type specimens in this paper.

Key words: *Eriobotrya* × *daduheensis*, Rosaceae, valid publication

The genus *Eriobotrya* Lindley (1822: 96, 102), a small genus of subtribe Malinae (formerly the Pyrinae or Maloideae, Rosaceae) consisting of 15–20 species, is distributed in Himalaya, eastern Asia and western Malesia (Vidal 1965; Mabberley 2008). Currently, the genus includes approximately 14 species in China. Among these species, *Eriobotrya japonica* (Thunberg) Lindley (1822: 102), commonly known as loquat, is an important fruit tree cultivated throughout southeastern Asia and south Europe (Gu & Spongberg 2003, Vilanova *et al.* 2001).

E. prinoides Rehd. et Wils. var. *daduheensis* H. Z. Zhang was published by Zhang *et al.* (Zhang *et al.* 1990), accompanied only by a Chinese diagnosis, without any Latin diagnosis or description, which was in violation of Article 39.1 of the ICBN (McNeill *et al.* 2012). Five collections were simultaneously listed in the original reference: *Anonymous* 85018, 85019, 85020, 85022, and 85023, but none of them was indicated as the type, in conflict with Article 40.1 of the ICBN. The herbarium in which the specimens conserved was not specified. Therefore, the name was invalid.

There are only five *Eriobotrya* taxa flowering in autumn and winter (from October to February) in China, including *E. japonica*, *E. prinoides* Rehder et E. H. Wilson (1912: 194), *E. prinoides* var. *daduheensis*, *E. malipoensis* K. C. Kuan (1963: 231) and *E. serrata* J. E. Vidal (1965: 558). *E. japonica* is widely distributed in Hubei and Sichuan (Liao *et al.* 1997). *E. prinoides* occurs naturally in Sichuan and Yunnan, *E. prinoides* var. *daduheensis* is distributed in Hanyuan county and Shimian county of Sichuan. *E. malipoensis* occurs only in Malipo, Yunnan. *E. serrata* is distributed in Guangxi and Yunnan (Zhang *et al.* 1990). *E. prinoides* var. *daduheensis* is currently known only from the overlapping regions of *E. japonica* and *E. prinoides* which has many intermediate morphological characteristics of *E. japonica* and *E. prinoides* (Zhang *et al.* 1990, Yan *et al.* 2011). Based on the sequence data of four low-copy nuclear genes and two chloroplast regions, Fan *et al.* (2014) provided convincing evidence for a hybrid status for *E. prinoides* var. *daduheensis*. Most hybrid individuals are later-generation hybrids, and both *E. japonica* and *E. prinoides* can serve as female parents. This result was consistent with the previous conclusions drawn from morphological traits (Yan *et al.* 2011), karyotype and peroxidase isozyme data (Tang 1997), RARD, AFLP and ISSR data (Yang *et al.* 2007, Wang *et al.*, 2012).

Considering its hybrid status, the name *Eriobotrya* × *daduheensis* (H. Z. Zhang) B. Tang (1997: 22) was proposed but with no Latin description and no type was designated, so it was a *nomen nudum*. In this paper, *Eriobotrya* × *daduheensis* H. Z. Zhang ex W. B. Liao, Q. Fan et M. Y. Ding is validated by giving a full description and designating the type specimens. Because there was no information about the herbarium in which the specimens mentioned in the protologue were conserved, we designated *Q. Fan* 9292 as the holotype of the name *Eriobotrya* × *daduheensis*.