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# Lectotypification of *Actinidia latifolia* var. *deliciosa* (Actinidiaceae)

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**ABSTRACT.** A lectotype is designated for *Actinidia latifolia* (Gardner & Champ.) Merr. var. *deliciosa* A. Chev. (Actinidiaceae), selecting the second plate from the Chevalier protologue. *Actinidia latifolia* var. *deliciosa* is the basionym for the well-known kiwifruit *A. deliciosa* (A. Chev.) C. F. Liang & A. R. Ferguson.

**Key words:** *Actinidia*, Actinidiaceae.

Auguste J. B. Chevalier (1940) described *Actinidia latifolia* (Gardner & Champ.) Merr. var. *deliciosa* A. Chev. from the plant cultivated in the Jardin des Plantes, Paris. Chevalier soon recognized that the variety belonged to *A. chinensis* Planch. and proposed the new combination in 1941 as *A. chinensis* var. *deliciosa* (A. Chev.) A. Chev. Liang (1975) described *A. chinensis* var. *hispidula* C. F. Liang, which proved to be the same taxon as *A. chinensis* var. *deliciosa* (Liang & Ferguson, 1984, 1986; Ferguson, 1990). Gui (1981) was the first to point out that the morphological distinction between *A. chinensis* var. *deliciosa* and the autonymic variety justified specific separation. Although Liang (1982) stressed that *A. chinensis* var. *deliciosa* should not be given specific status, Liang and Ferguson (1984, 1986) did raise it to the rank of species in the new combination *A. deliciosa* (A. Chev.) C. F. Liang & A. R. Ferguson. From then on, it has been hotly debated whether the two taxa are two distinct species or not (Ferguson, 1990; Xiong, 1991; Webby et al., 1994; Hirsch et al., 2002; Huang et al., 2002; Chat et al., 2004; Jia et al., 2005; J. Q. Li et al., 2007; Z. Z. Li et al., 2007). However, the type has remained ambiguous until now.

The two taxa are very similar to each other. The main differences between *Actinidia chinensis* var. *chinensis* and *A. chinensis* var. *deliciosa* are that the former has young branchlets and petioles that are white pubescent to roughly tomentose, glabrous to glabrate when mature, and fruits that are densely tomentose, but soon glabrous. In variety *deliciosa*, the young branchlets and petioles are brownish strigose, with the hairs not easily lost, and the fruits are densely hispid, more or less hispid when mature (J. Q. Li et al., 2007). *Actinidia chinensis* var. *deliciosa* is mainly distributed in western mainland China, whereas *A.*

*chinensis* var. *chinensis* is found further to the east (Liang, 1975; Ferguson, 1990; J. Q. Li et al., 2007). The plants are of great economic importance, because their fruits, well-known as kiwifruit, are popular all over the world. More than 120,000 ha. of orchard are planted with the two taxa, with an annual production exceeding 1.35 million tons of fresh fruit (Ferguson & Huang, 2007).

The taxonomy of *Actinidia chinensis* var. *chinensis* and *A. chinensis* var. *deliciosa* needs further revision based on extensive population sampling across their entire geographic range, with careful observation of the variation of morphological characters and investigation of genetic variation using molecular markers. However, when *A. latifolia* var. *deliciosa* was published, no specimen was selected as a type (Chevalier, 1940). We suspected that perhaps Chevalier had preserved a specimen in the Muséum National d'Histoire Naturelle (P), since the plant was cultivated in the Jardin des Plantes in Paris. Dr. Joël Jérémie kindly helped in searching through the specimens at P identified as *A. latifolia* var. *deliciosa*, in particular for specimens annotated by Auguste Chevalier, but no type specimen was ever discovered. We therefore think that it is necessary to designate a type. There are two illustrations in the protologue of *A. latifolia* var. *deliciosa* (Chevalier, 1940). The first one shows the whole liana growing against a wall in the Jardin des Plantes. The second plate (Chevalier, 1940: 15, planche II; our Fig. 1) shows a fruiting branch alongside detached fruits (one bisected longitudinally). This plate is referenced by Chevalier at the end of his description (Chevalier, 1940: 14) and is easily recognizable as *A. latifolia* var. *deliciosa* (i.e., *A. chinensis* var. *deliciosa*). Plate 2 clearly displays the characters distinguishing *A. latifolia* var. *deliciosa* from *A. latifolia*, i.e., the orbicular leaf blade with a subcordate base and an almost rounded apex; the fruiting branch with one to two fruits per infructescence; and fruits that are ellipsoid or ovoid and hispid, with reflexed persistent sepals and long pedicels. In contrast, the infructescence of *A. latifolia* has many glabrous fruits when mature. According to Articles 9.2, 9.9, and 9.10 of the *International Code of*

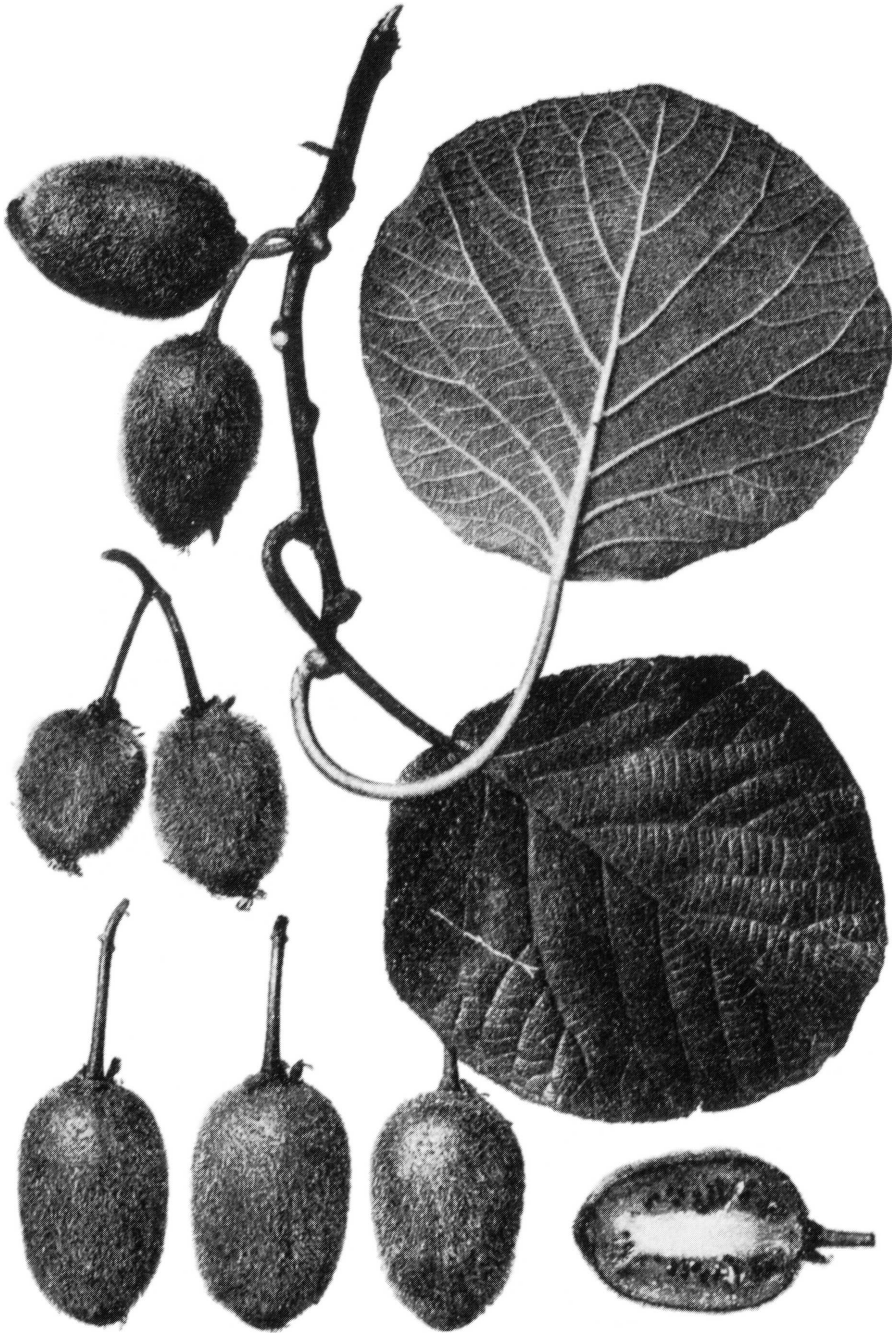


Figure 1. Lectotype of *Actinidia latifolia* (Gardner & Champ.) Merr. var. *deliciosa* A. Chev. The original caption read "Fructification du même" (Chevalier, 1940: 15, pl. 2).

*Botanical Nomenclature* (McNeill et al., 2006), we here designate this second illustration as the lectotype of *A. latifolia* var. *deliciosa*.

***Actinidia latifolia*** (Gardner & Champ.) Merr. var. ***deliciosa*** A. Chev., Rev. Bot. Appl. Agric. Trop.

20: 12. 1940. TYPE: "Fructification du même," Planche II in Chevalier, 1940 (lectotype, designated here, Pl. 2 in Chevalier, 1940: 15). EPITYPE: China. Hubei: Wufeng, 2 Aug. 1959, R. H. Huang 1991 (epitype, HIB). Figure 1.

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