



## New combinations in *Persicaria* (Polygonaceae: Persicarieae) for the Flora of China

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The generic delimitation of *Polygonum* Linnaeus (1753: 359) has been controversial, and interpreted differently by various authors, especially in the past (Meisner 1826, Gross 1913, Tzvelev 1987). Several morphological and anatomical characters, such as in pollen (Hedberg 1946), vegetative parts (Haraldson, 1978), flower (Ronse Decraene & Akeroyd 1988), and fruit (Ronse Decraene *et al.* 2000), have been considered in subdividing the heterogeneous genus *Polygonum* into a number of smaller groups, which was also supported by recent molecular studies (Sanchez *et al.* 2009, Sanchez *et al.* 2011, Schuster *et al.* 2011). Genera and tribes in the buckwheat family have been redefined (Sanchez *et al.* 2011) and *Persicaria* (Linnaeus 1753: 360) Miller (1754), which is formerly and popularly treated as synonym of *Polygonum* in tribe Polygoneae, has been placed in the redefined tribe Persicarieae (Sanchez *et al.* 2011). Many combinations were already proposed to accommodate these generic changes, but six *Polygonum* species in the *Flora of China* (Li *et al.* 2003), have not been transferred and the new combinations in *Persicaria* are still necessary. Information on the types (five holotypes and one lectotype here designated) and morphological notes are also provided.

***Persicaria chinensis*** (Linnaeus 1753: 363) Gross (1913: 269) var. ***paradoxa*** (H. Léveillé) B. Li, *comb. nov.*

Bas.: *Polygonum paradoxum* H. Léveillé (1909: 339). Type:—CHINA. Yunnan, yunnansen, haies, collines, 6 May 1904, Marie 351 (holotype E!).

**Note:**—The var. *paradoxa* differs from the nominal one in having broadly lanceolate leaves blades (7.0–12.0 × 1.5–2.5 cm), while the var. *chinensis* has leaves blades ovate to narrowly ovate (4.0–10.0 × 2.0–4.0 cm).

***Persicaria huananensis*** (A. J. Li) B. Li, *comb. nov.*

Bas.: *Polygonum huananense* A. J. Li (1995: 413). Type:—CHINA. Guangdong, Shunde, in marginibus stagnorum, 12 July 1958, Huang 111018 (holotype PE!).

***Persicaria jucunda*** (Meisner) Migo (1939 :142) var. ***rotunda*** (Z. Z. Zhou & Q. Y. Sun) B. Li, *comb. nov.*

Bas.: *Polygonum jucundum* Meisner (1826 : 71). var. *rotundum* Z. Z. Zhou & Q. Y. Sun in Zhou & al. (2007: 713). Type:—CHINA. Anhui, Dongzhi, Shengjin Lake, on riparian plains, alt. 6–20 m a. s. l., 4 October 2006, Zhou 0602 (holotype PE! isotype ANU).

**Note:**—The var. *rotunda* differs from the nominal one in having narrowly lanceolate to linear-lanceolate leaves blades (4.5–9.0 × 0.5–0.9 cm), with rounded base and nearly absent petiole [var. *jacinda* has leaves blades elliptic-lanceolate (6.0–10.0 × 1.5–2.5 cm), cuneate at the base and petiole 3.0–6.0 mm long].

***Persicaria longiseta*** (Brujin 1854: 307) Moldenke (1941: 192) var. ***rotundata*** (A. J. Li) B. Li, *comb. nov.*

Bas.: *Polygonum longisetum* Brujin in de Brujin (1854: 307) var. *rotundatum* Li (1995: 418). Type:—CHINA. Jiangsu, Baoyin, huajiatan, 31 May 1961, Liou 104 (holotype PE!).