A new combination in Persicaria (Polygonaceae) and a new record for Thailand

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ABSTRACT. *Polygonum lanigerum* R.Br. is given varietal status as *Persicaria lapathifolia* (L.) S.F. Gray var. *lanigera* (R.Br.) Chantar. & P. Tubtimtong. The taxon is newly recorded for Thailand and is described and illustrated.

The following new combination has arisen from work being carried out on Polygonaceae for the Flora of Thailand.

Persicaria lapathifolia (L.) S.F. Gray var. lanigera (R.Br.) Chantar. & P. Tubtimtong, comb. et stat. nov.— *Polygonum lanigerum* R.Br., Prodr. Fl. Nov. Holl.: 419. 1810. Type: Australia, Port Jackson, *Brown* 3003 (lectotype BM!).— *P. lanatum* Roxb., Hort. Beng.: 29. 1814, nom. nud.; Fl. Ind. 2: 285. 1832. Type: India, *Roxburgh* s.n. (isotype BM!).— *P. lapathifolium* L. var. *lanatum* (Roxb.) Steward in Contrib. Gray Herb. 88: 71. 1930.— *P. lanigera* (R.Br.) Soják in Preslia 46: 153. 1974.— *P. lapathifolia* (L.) S.F. Gray subsp. *lanata* (Roxb.) Soják in Preslia 46: 154. 1974. Fig. 1.

Erect to scandent annual herb, 0.5–1 m tall; stem branched, moderately to densely woolly pubescent. Leaves lanceolate, 3-10 by 1-4 cm, apex acute to acuminate, base attenuate, margin ciliate, upper surfaces moderately woolly pubescent, lower surfaces moderately to densely woolly pubescent; petiole sessile or up to 1 cm long, densely woolly pubescent. Ocreae cylindrical, 1–2.5 cm long, glabrous or sparsely woolly pubescent, truncate or slightly oblique at the apex, glabrous or ciliate. *Inflorescences* terminal or in the axils of upper leaves, spiciform racemes, 1–5 cm long, often branches 1–3 times; inflorescence bracts cup-shaped, acuminate at apex, with a green ridges along the midvein; inflorescence bractlets cup-shaped, 2-2.5 cm long, densely pubescent, oblique at apex, with short hairs at margin; peduncle 0.5-5 cm long. Flowers in 5-6-flowered fascicles; bracts membranous, cylindrical, 1-2 mm long, truncate; pedicels 1.5–2 mm long; perianth 4-parted, pale yellow, 2–3.5 mm long, apex obtuse, with densely glandular dots at the centre of the tepals; stamens 6; filaments 0.8– 1.5 mm long; anthers discoid, ca. 0.2 mm long; style one, deeply 2-cleft, 1.5-2 mm long, included; stigmas 2. Achenes slightly biconcave, broadly ovoid in outline, 2–2.5 mm long, brown, smooth.

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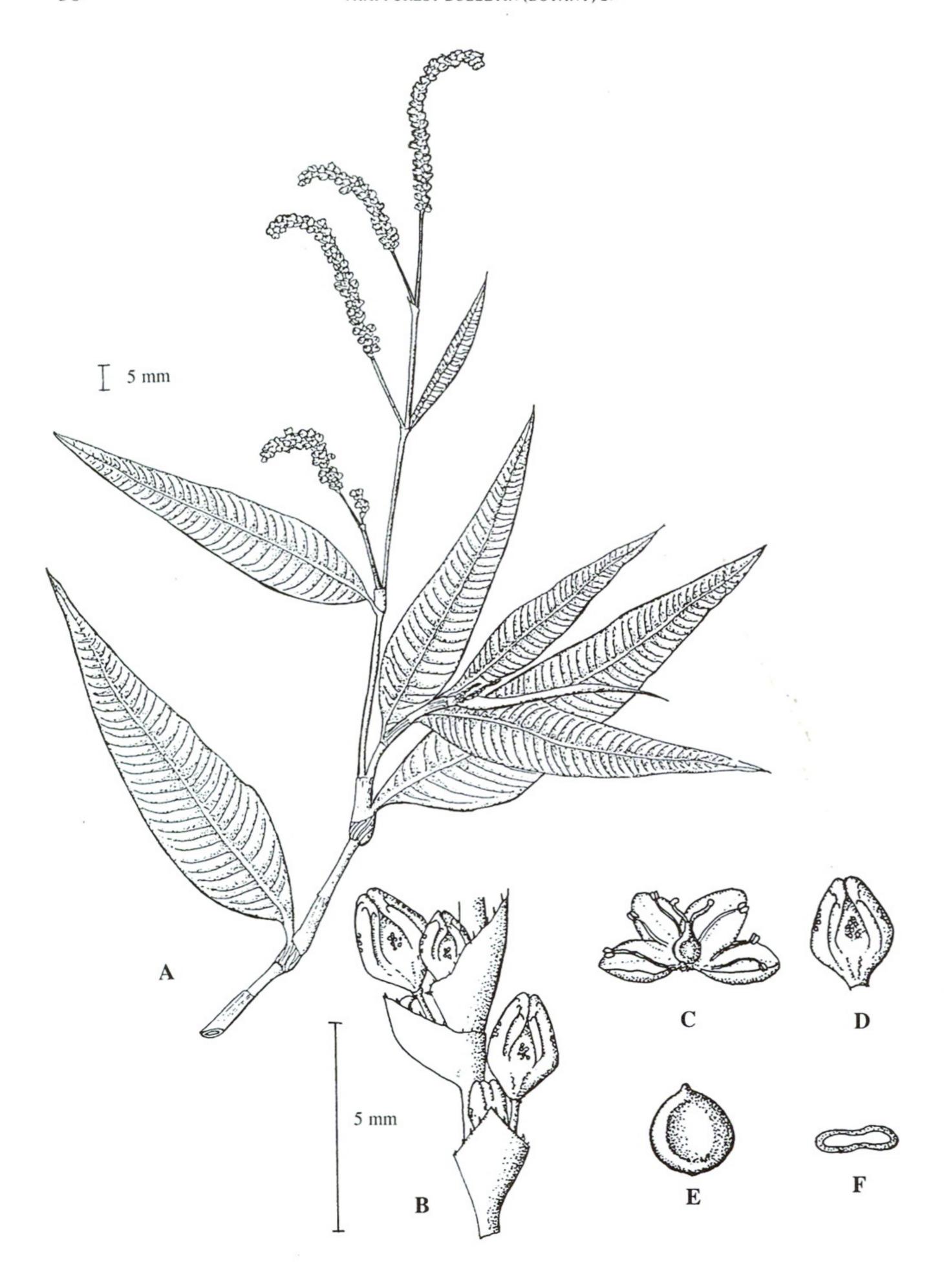


Figure 1. Persicaria lapathifolia (L.) S.F. Gray var. lanigera (R.Br.) Chantar. & P. Tubtimtong: A. habit; B. portion of inflorescence; C. dissected flower; D. flower in fruit; E. achene; F. achene in T.S. All from Chantaranothai & Tubtimtong 42-08.

Thailand.— NORTH-EASTERN: Nong Khai [Tha Bo, 11 April 1998, *Chantaranothai & Tubtimtong* 41-08 (Khon Kaen University Herbarium)], Udon Thani [Kumphawapi, 10 Nov. 1999, *Chantaranothai & Tubtimtong* 42-08 (Khon Kaen University Herbarium).

Distribution.— India, Nepal, Bhutan, Myanmar, Japan (Kyushu), China (Hainan), Malaysia, Indonesia (Java), Australia.

Ecology.— In open, sunny places, occurring naturally along ditches in rice paddies, abandoned fields and roadsides. Flowering October-February.

Notes.— *Persicaria lapathifolia* var. *lanigera* differs from the typical variety in having woolly hairs on both surfaces of the leaves.

The earliest name applied to this taxon was *Polygonum lanigerum* R.Br. based on material from Australia. Roxburgh (1832) described *P. lanatum* which Hooker (1886) treated as a synonym of *P. lanigerum*. Danser (1927) and Steward (1930) argued that Asian material which had been named *P. lanigerum* was actually *P. lapathifolium*, and that African and Australian material to which Brown's description applied was *P. lanigerum*. However, they did not highlight the characters separating the two species. In fact, the African specimens are *Persicaria senegalense* (Meissn.) Soják f. *albotomentosa* (Graham) K.L. Wilson (syn. *Polygonum senegalensis* f. *albotomentosum*) while the specimens from Asia and Australia are *Polygonum lanigerum*.

Danser (1927) also placed *Polygonum lanatum* into the synonymy of *Polygonum lapathifolium*, although Steward (1930) recognised it as *P. lapathifolium* var. *lanatum*. Soják (1970) made combinations of both *P. lanigerum* and *P. lapathifolium* var. *lanatum* under *Persicaria*, namely *P. lanigera* and *P. lapathifolia* subsp. *lanata*. Our examination of type material shows that *P. lanigera* falls within the broad circumscription of *P. lapathifolia* with the minor differences indicated above. Therefore, we recognise *P. lanigera* as a variety of *P. lapathifolia*.

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REFERENCES

Danser, B.H. 1927. Die Polygonaceen Niederlaendisch-Ostindiens. Bull. Jard. Bot. Buitenzorg, sér. 3, 8: 117–261.

Hooker, J.D. 1886. The Flora of British India. Vol. 5. L. Reeve, London.

Soják, J. 1974. Bemerkungen zur Gattung *Truellum* Houtt. (Polygonaceae). Preslia 46: 139–156.

Steward, A.N. 1930. The Polygonaceae of Eastern Asia. Contrib. Gray Herb. 5(88): 1–129.