

5. ANTENORON Rafinesque, Fl. Ludov. 28. 1817.

金线草属 jin xian cao shu

Li Anjen (李安仁 Li An-ren); Chong-wook Park

Sunania Rafinesque; *Tovara* Adanson, nom. rej.

Herbs perennial, monoecious. Rhizomes robust. Stems erect, simple or branched above. Leaves simple, alternate, petiolate; leaf blade elliptic or obovate, margin entire; ocrea membranous. Inflorescence terminal or axillary, racemose, spicate. Pedicel divergent, articulate. Flowers bisexual. Perianth persistent, 4-parted. Stamens 5. Styles 2, persistent, enlarged and indurate at maturity, apex hooked. Achenes ovoid, biconvex.

Three species: Asia, North America; one species in China.

Treatments by Haraldson (Symb. Bot. Upsal. 22(2): 1-95. 1978) and Ronse Decraene & Akeroyd (Bot. J. Linn. Soc. 98: 321-371. 1988), considered *Antenoron* to be a section of *Persicaria*, for which the correct name is *P.* sect. *Tovara*. For further information, the reader may wish to refer to the following studies: Park et al. (Korean J. Bot. 35: 385-392. 1992) and Mun & Park (Pl. Syst. Evol. 196: 153-159. 1995).

1. Antenoron filiforme (Thunberg) Roberty & Vautier, Bois-siera 10: 35. 1964.

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Herbs perennial. Rhizomes stout. Stems erect, 50-80 cm tall, striate, appressed hispid, swollen at nodes. Petiole 1-1.5 cm, appressed hispid; leaf blade elliptic or narrowly elliptic to ovate, rarely obovate, 6-15 × 4-8 cm, both surfaces appressed hispid, base cuneate, margin entire, apex acute or acuminate; ocrea tubular, 5-10 mm, membranous, shortly ciliate. Inflorescence terminal or axillary, 15-35 cm, slender, laxly flowered; bracts funnel-shaped, 2-3 mm, ciliate, 1-3-flowered. Pedicel 3-4 mm. Perianth rose, 4-parted; tepals ovate, ca. 3 mm, accrescent. Stamens usually 5, included. Styles 2, persistent, enlarged and indurate at maturity, 3.5-4 mm, deflexed and hooked at apex, long exserted from perianth. Achenes included in persistent perianth, dark brown, shiny, ovoid, biconvex, smooth. Fl. Aug-Oct, fr. Sep-Nov.

Forests, thickets, valleys; 100-2500 m. Anhui, Fujian, S Gansu, Guangdong, Guangxi, Guizhou, Henan, Hubei, Hunan, Jiangsu, Jiangxi, S Shaanxi, Shandong, Sichuan, Taiwan, Yunnan, Zhejiang [Japan, Korea, Myanmar, Russia (Far East)].

- 1a. Leaves shortly appressed hispid on both surfaces 1c. var. *neofiliforme*
- 1b. Leaves appressed hispid on both surfaces.
 - 2a. Leaves broadly elliptic to ovate, apex shortly acuminate or acute, base cuneate to rounded 1a. var. *filiforme*
 - 2b. Leaves narrower, oblong, apex long acuminate, base nearly cuneate 1b. var. *kachinum*

1a. Antenoron filiforme var. ***filiforme***

金线草(原变种) jin xian cao (yuan bian zhong)

Polygonum filiforme Thunberg in Murray, Syst. Veg., ed. 14, 377. 1784; *Persicaria filiformis* (Thunberg) Nakai; *Polygonum virginianum* Linnaeus var. *filiforme* (Thunberg) Nakai; *P. virginianum* f. *glabratum* Matsuda; *Sunania filiformis* (Thunberg) Rafinesque; *Tovara filiformis* (Thunberg) Nakai; *T. ryukyuensis* Masamune; *T. virginiana* (Linnaeus) Rafinesque

var. *filiformis* (Thunberg) Steward.

Leaves broadly elliptic to ovate, both surfaces appressed hispid, base cuneate, apex shortly acuminate or acute. Fl. Aug-Oct, fr. Sep-Nov.

Forests on mountain slopes, valleys; 100-2500 m. Anhui, Fujian, S Gansu, Guangdong, Guangxi, Guizhou, Henan, Hubei, Hunan, Jiangsu, Jiangxi, S Shaanxi, Shandong, Sichuan, Taiwan, Yunnan, Zhejiang [Japan, Korea, Myanmar, Russia (Far East)].

1b. Antenoron filiforme var. ***kachinum*** (Nieuwland) H. Hara, J. Jap. Bot. 40: 192. 1965.

毛叶红珠七 mao ye hong zhu qi

Tovara virginiana (Linnaeus) Rafinesque var. *kachina* Nieuwland, Amer. Midl. Nat. 2: 182. 1912; *T. filiformis* (Thunberg) Nakai var. *kachina* (Nieuwland) H. L. Li.

Leaves appressed hispid on both surfaces, base nearly cuneate, apex long acuminate. Fl. Aug-Sep, fr. Sep-Nov.

Mixed forests on mountain slopes, thickets in valleys; 500-1300 m. S Yunnan [Myanmar].

One of us (Park) believes that this is a variety of the following taxon, which, in turn, should be treated at specific rank (see Park et al., Korean J. Bot. 35: 385-392. 1992).

1c. Antenoron filiforme var. ***neofiliforme*** (Nakai) A. J. Li, Fl. Reipubl. Popularis Sin. 25(1): 108. 1998.

短毛金线草 duan mao jin xian cao

Polygonum neofiliforme Nakai, Bot Mag. (Tokyo) 36: 117. 1922; *Antenoron neofiliforme* (Nakai) H. Hara; *Persicaria neofiliformis* (Nakai) Ohki; *Polygonum filiforme* subsp. *neofiliforme* (Nakai) Kitamura; *P. filiforme* var. *neofiliforme* (Nakai) Ohwi; *Sunania neofiliformis* (Nakai) H. Hara; *Tovara filiformis* (Thunberg) Nakai var. *neofiliformis* (Nakai) Makino; *T. neofiliformis* (Nakai) Nakai.

Leaves oblong, narrow, both surfaces shortly appressed hispid, apex long acuminate. Fl. Aug-Oct, fr. Sep-Nov.

• Forests, moist valleys; 200-2300 m. Anhui, Fujian, S Gansu, Guangdong, Guangxi, Guizhou, Henan, Hubei, Hunan, Jiangsu, Jiangxi, S Shaanxi, Shandong, Sichuan, Yunnan, Zhejiang.

One of us (Park) believes that this taxon is a closely allied yet distinct species on the basis of results from flavonoid analysis (see Mun & Park, Pl. Syst. Evol. 196: 153–159. 1995).

