
Eleutherococcus humillimus, a New Combination in Chinese Araliaceae

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ABSTRACT. A new combination, *Eleutherococcus humillimus* (Y. S. Lian & X. L. Chen) Y. F. Deng, is made.

Key words: *Acanthopanax*, Araliaceae, China, *Eleutherococcus*.

Eleutherococcus Maximowicz (1859) is the correct name for the genus previously widely referred to as *Acanthopanax* (Decaisne & Planchon) Witte (1861). Nomenclatural problems involving these genera have been discussed by several authors over the years (Hu, 1980; Ohashi, 1987; Hsu & Pan, 1993; Zhu et al., 1995). *Eleutherococcus* has about 25 species distributed mainly in northeastern Asia, including China, Korea, and Japan, with some members extending to southwestern Asia (Kim & Sun, 2000).

Acanthopanax was recognized at the subgeneric rank under *Panax* L. by Decaisne and Planchon (1854), and was later raised by Witte (1861) to generic rank. Harms (1897: 49) combined both under one genus and adopted the name *Acanthopanax*, which has been widely used since by many botanists (Harms, 1918; Li, 1942; Hoo & Tseng, 1978; Philipson, 1979; Shang, 1985a, 1985b). However, the name *Acanthopanax* does not have priority under the current ICBN (Greuter et al., 2000), and several recent authors (e.g., Hu, 1980; Stone, 1980; Ohashi, 1987; Hsu & Pan, 1993; Zhu et al., 1995) have accordingly transferred taxa from *Acanthopanax* to *Eleutherococcus*.

In 1918 Harms classified the genus into seven sections, namely, sect. *Eleutherococcus*, sect. *Cephalopanax*, sect. *Euacanthopanax*, sect. *Zanthoxylolanx*, sect. *Evodiopanax*, sect. *Sciadophylloides*, and sect. *Kalopanax*. This system has been accepted by many authors (Hoo & Tseng, 1978; Shang, 1985a, 1985b; Ohashi, 1987), but section *Kalopanax*, typified by *K. pictus* (Thunberg) Nakai, is generally treated as a distinct genus. Several years later, Nakai (1924) elevated section *Evodiopanax* to generic rank, then Shang et al. (2000) synonymized it with *Gamblea* C. B. Clarke and made four new combinations. Shang and Huang

(1993) raised section *Sciadophylloides* to generic rank as *Chengiopanax* C. B. Shang & J. Y. Huang with two species, *C. fargesii* (Franchet) C. B. Shang & J. Y. Huang and *C. sciadophylloides* (Franchet & Savatier) C. B. Shang & J. Y. Huang. Recognition of the unarmed genera *Gamblea* and *Chengiopanax* as distinct from *Eleutherococcus*, which has spines or prickles, was recently confirmed using ITS sequence data (Wen et al., 2001).

Acanthopanax humillimus Y. S. Lian & X. L. Chen was described by Lian and Chen (1994) based on collections from Gansu Province, China, but the necessary combination in *Eleutherococcus* is made here.

Eleutherococcus humillimus (Y. S. Lian & X. L. Chen) Y. F. Deng, comb. nov. *Basionym: Acanthopanax humillimus* Y. S. Lian & X. L. Chen, *Acta Bot. Boreal.-Occid. Sin.* 14(6): 76. 1994.
TYPE: China. Gansu: Lintan Xian, "Lianhua mountain, in locis udis regionis in sylvis," 2700 m, 9 July 1994, Y. S. Lian et al. 94065 (holotype, NWTC).

Distribution. A rare species endemic to southern Gansu and northern Sichuan Provinces of China, in alpine habitats at high elevations (2700–3000 m).

Eleutherococcus humillimus most closely resembles *E. giraldii* (Harms) Nakai but differs in being a subshrub, only 5–15 cm tall (vs. 1–3 m), with 3 or 4 (rarely 5) ovaries and styles (vs. 5 ovaries and styles), the latter connate for ca. 1/5 their length (rather than 1/4–1/2). *Eleutherococcus humillimus* occurs at high elevations and may be an alpine vicariant of *E. giraldii*.

Additional specimens examined. CHINA. SICHUAN: Hongyuan Xian, Shujingsi, Yakou, alt. 3450 m, in ravine, 8 Oct. 1957, Li Xing 72410 (IBSC, SZ); Hongyuan Xian, Shujingsi, Yakou, alt. 3400 m, 9 Oct. 1957, Li Xing 72444 (IBSC, SZ); Nanping Xian, Jiuzhaigou, 3200 m, in *Picea* forest, 25 Sep. 1986, Wu Zhengyi et al. 811 (KUN); Nanping xian, Jiuzhaigou, Changhai, 2800 m, in *Picea* forest, 26 Sep. 1986, Wu Zhengyi et al. 982 (KUN); Nanping Xian, Jiuzhaigou, in forest, 25 Sep. 1986, Wu Zhengyi et al. 1110 (KUN); Zoigê (Ruoergai) Xian, Baxi gongshe,

Yangyugou, in *Picea* forest, alt. 3100 m, 28 June 1975, *Chengdu Biological Institute* 10063 (IBSC). **Gansu:** Dangchang xian, Daheba, in subalpine shrubby, alt. 3000 m, 24 Sep. 1979, *Lian Yongshan* 790922 (NWTC); Tewo xian, Lazikou Linchang, in the forest, on the rock, alt. 3000 m, 24 July 1980, *Lian Yongshan et al.* 800222 (NWTC).

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Literature Cited

- Decaisne, J. & J.-E. Planchon. 1854. Esquisse d'une monographie des Araliacées. *Rev. Hort.*, sér. 4, 3: 104–109.
- Greuter, W., J. McNeill, F. R. Barrie, H. M. Burdet, V. Demoulin, T. S. Filgueiras, D. H. Nicolson, P. C. Silva, J. E. Skog, P. Trehane, N. J. Turland & D. L. Hawksworth (editors). 2000. International Code of Botanical Nomenclature (Saint Louis Code). *Regnum Veg.* 138.
- Harms, H. 1894–1897. Araliaceae. Pp. 1–48 [1894], 49–62 [1897] in: A. Engler & K. Prantl (editors), *Die natürlichen Pflanzenfamilien*, 3(8). Wilhelm Engelmann, Leipzig.
- . 1918. Übersicht über die Arten der Gattung *Acanthopanax*. *Mitt. Deutsch. Dendrol. Ges.* 27: 1–39 + t. 1–8b.
- Hoo, G. & C. J. Tseng. 1978. Araliaceae. Pp. 1–190 in *Flora Reipublicae Popularis Sinicae*, 54. Science Press, Beijing.
- Hsu, P. S. & S. L. Pan. 1993. Additional transfers of Chinese *Acanthopanax* to *Eleutherococcus* (Araliaceae). *Sida* 15: 593–595.
- Hu, S. Y. 1980. *Eleutherococcus* vs. *Acanthopanax*. *J. Arnold Arbor.* 61: 107–111.
- Kim, C. H. & B. Y. Sun. 2000. New taxa and combinations in *Eleutherococcus* (Araliaceae) from eastern Asia. *Novon* 10: 209–214.
- Li, H. L. 1942. The Araliaceae of China. *Sargentia* 2: 1–134.
- Lian, Y. S. & X. L. Chen. 1994. A new species of the genus *Acanthopanax* Miq. *Acta Bot. Boreal.-Occid. Sin.* 14(6): 76–77.
- Maximowicz, C. J. 1859. *Primitiae florae amurensis*. *Mém. Acad. Imp. Sci. St.-Pétersbourg Divers Savans* 9.
- Nakai, T. 1924. Araliaceae imperii Japonici. *J. Arnold Arbor.* 5: 1–36.
- Ohashi, H. 1987. *Eleutherococcus* (Araliaceae)—A new system and new combinations. *J. Jap. Bot.* 62: 353–361.
- Philipson, W. R. 1979. Araliaceae—I. Pp. 1–105 in C. G. G. J. van Steenis (editor), *Flora Malesiana*, 9. Martinus Nijhoff and Dr. W. Junk Publishers, The Hague.
- Shang, C. B. 1985a. Araliaceae. Pp. 1720–1813 in W. C. Cheng (editor), *Sylva Sinica*, 2. Chinese Forestry Press, Beijing.
- . 1985b. New taxa and some revisions about the Araliaceae of China. *J. Nanjing Inst. Forest.* 2: 15–28.
- . & J. Y. Huang. 1993. *Chengiopanax*—A new genus of Araliaceae. *Bot. Bull., Harbin.* 13(1): 44–49.
- . P. P. Lowry II & D. G. Frodin. 2000. A taxonomic revision and re-definition of the genus *Gamblea* (Araliaceae). *Adansonia*, sér. 3, 22: 45–55.
- Stone, B. C. 1980. A nomenclatural change in Malaysian Araliaceae: *Eleutherococcus malayanus* (Henderson) comb. nov. instead of *Acanthopanax malayanus* Hend. *Malaysian Forester* 43: 395.
- Wen, J., G. M. Plunkett, A. Mitchell & S. Wagstaff. 2001. Evolution of Araliaceae: A phylogenetic analysis based on the ITS sequences of nrDNA. *Syst. Bot.* 26: 144–167.
- Witte, H. 1861. Les Araliacées des jardins Hollandais. *Ann. Hort. Bot.* 4: 87–95.
- Zhu, X. Y., S. Ge & D. Y. Hong. 1995. A critical note on the scientific name *Acanthopanax* Miq[.] and several new combinations. *Bull. Bot. Res., Harbin* 15: 441–443.