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Author(s): Li Xin-Wei, Li Jian-Qiang and Soejarto Djaja Djendoel

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New Combinations in Actinidiaceae from China

Li Xin-Wei

Herbarium (HIB), Wuhan Botanical Garden of Chinese Academy of Sciences, Wuhan 430074,
People's Republic of China; Graduate School of the Chinese Academy of Sciences,
Beijing 100039, People's Republic of China

Li Jian-Qiang

Herbarium (HIB), Wuhan Botanical Garden of Chinese Academy of Sciences, Wuhan 430074,
People's Republic of China. jianqiangl@hotmail.com (author for correspondence)

Soejarto Djaja Djendoel

College of Pharmacy, University of Illinois at Chicago, 833 S. Wood Street,
Chicago, Illinois 60612, U.S.A.

ABSTRACT. During the revision of Actinidiaceae for the *Flora of China*, two new combinations are proposed, *Actinidia fulvicoma* var. *cinerascens* (C. F. Liang) J. Q. Li & D. D. Soejarto and *Saurauia polyneura* var. *paucinervis* (C. F. Liang & Y. S. Wang) J. Q. Li & D. D. Soejarto.

Key words: *Actinidia*, China, Guangxi, *Saurauia*, Xizang.

In the first comprehensive revision of *Actinidia* Lindley, Dunn recognized 24 species in four sections, i.e., sections *Ampulliferae* Dunn, *Leiocarphae* Dunn, *Maculatae* Dunn, and *Vestitae* Dunn (Dunn, 1911). Later, H. L. Li's revision (1952) presented 36 species, transferred *Ampulliferae* into *Leiocarphae*, and divided *Vestitae* into *Strigosae* Li and *Stellatae* Li. H. L. Li later alleged that *Actinidia* consisted of 25 species without providing a detailed treatment (Li, 1976). Liang adopted H. L. Li's scheme (1952) and recognized 51 species in China (Liang, 1984). More recently, Huang et al. (2000) proposed that there were 62 species of *Actinidia* in China.

This increasing species number for *Actinidia* has confused the taxonomy, and its highly variable and diverse vegetative and reproductive characters are mainly responsible. The taxonomy of the genus needs further revision based on extensive examination of specimens and careful observation in the herbarium and field. We examined the specimens in the herbaria of the Institute of Botany, the Chinese Academy of Sciences (PE) and the Guangxi Institute of Botany, Guangxi Zhuangzu Autonomous and the Chinese Academy of Sciences (IBK). We herein recognize ca. 48 species of the genus *Actinidia* for the forthcoming treatment for the *Flora of China* project.

The taxonomy of *Saurauia* Willdenow is much less confusing than that of *Actinidia*, although the trichome and other characters exhibit considerable variation; we recognize 13 species from China.

1. *Actinidia fulvicoma* Hance, J. Bot. 23: 321. 1885. TYPE: China. Guangdong: Luo-Fu-Shan, May 1883, *B. C. Henry s.n.* (holotype, K).

1a. *Actinidia fulvicoma* var. *cinerascens* (C. F. Liang) J. Q. Li & D. D. Soejarto, comb. nov. Basionym: *Actinidia cinerascens* C. F. Liang, Fl. Reipubl. Popularis Sin. 49(2): 252–254, 320–321. 1984. TYPE: China. Guangdong: Luofu Shan, 27 July 1930, *N. Q. Chen 41208* (holotype, IBK).

Taxa attributed to *Actinidia cinerascens* have very similar fruit and inflorescences to *A. fulvicoma*. They share densely tomentose cymes with white flowers and cylindric-ovoid fruits. The petals are obovate to narrowly obovate, the length of the petals of *A. cinerascens* is 6–7 mm, and that of *A. fulvicoma* is 6–17 mm; the fruits of both are 1.5–2 cm long with persistent reflexed sepals (Liang, 1984). *Actinidia fulvicoma* is densely tomentose on branchlets and densely stellate-tomentose on the leaves abaxially. Occasionally, specimens of *A. fulvicoma* may be rusty-velutinous on the branchlets or sparsely stellate-tomentose on the leaves abaxially, indicating that there is no clear-cut distinction between the characters of the trichomes of *A. fulvicoma* and *A. cinerascens*. The trichomes of *Actinidia* are highly variable, and taking into account other overlapping of characters, *A. cinerascens* is reduced to a variety of *A. fulvicoma*.

Actinidia fulvicoma var. *cinerascens* differs from other taxa of this species in that it is usually brownish

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velutinous on branchlets and petioles and partly thinly tomentose on the abaxial surface of the leaves, while other taxa are usually tomentose or hirsute on branchlets and petioles and densely tomentose on the abaxial surface of the leaves.

Distribution. Low mountain forests from Guangdong to Hunan at 300–1000 m.

Representative specimens examined. CHINA. **Guangdong:** Lianping, Z. F. Wei 120091 (IBK, PE); Huiyang, Z. F. Wei 121600 (PE); Luofushan, N. Q. Chen 41085 (PE); Wuhua, X. G. Li 201603 (IBK). **Hunnan:** Chengbu, T. R. Cao 43 (IBK).

2. *Saurauia polyneura* C. F. Liang & Y. S. Wang, Fl. Reipubl. Popularis Sin. 49(2): 333. 1984. TYPE: China. Yunnan: Nuijiang Valley, T. T. Yü 19211 (holotype, PE).

2a. *Saurauia polyneura* var. *paucinervis* (C. F. Liang & Y. S. Wang) J. Q. Li & D. D. Soejarto, comb. nov. Basionym: *Saurauia paucinervis* C. F. Liang & Y. S. Wang, Fl. Reipubl. Popularis Sin. 49(2): 299, 333–334. 1984. TYPE: China. Xizang: Chayu, *Qinghai-Xizang Exp.* 642 (holotype, PE).

In Liang's (1984) key, he differentiated *Saurauia polyneura* from *S. paucinervis* only by the number of lateral veins of the leaves: the former has 35 to 40 pairs, while the latter has 15 to 20 pairs. Upon close examination, the number of pairs of lateral veins on mature leaves is variable and ranges from about 22 to 40 in these two taxa. This is somewhat but not tightly

correlated with the leaf shape, which is narrowly obovate-lanceolate to narrowly oblong, often with cuneate base in *S. polyneura* and obovate-elliptic or narrowly obovate-elliptic to elliptic or narrowly elliptic, with obtuse base in *S. paucinervis*. Herein, we relegate *S. paucinervis* to a variety of *S. polyneura*.

Distribution. Forests, valleys in SE Xizang at 1600–2200 m.

Representative specimens examined (all at PE). CHINA. **Xizang:** Chayu, B. S. Li 6941, Z. C. Ni 371, 443, *Qinghai-Xizang Exp.* 1483; Motuo, S. Z. Cheng 233, 3052, 1602, 4737, 2270.

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Literature Cited

- Dunn, S. T. 1911. A revision of the genus *Actinidia* Lindl. J. Linn. Soc., Bot. 39: 394–410.
Huang, H. W., J. J. Gong, S. M. Wang, Z. C. He, Z. H. Zhang & J. Q. Li. 2000. Genetic diversity in the genus *Actinidia*. Chin. Biodivers. 8: 1–12.
Li, H. L. 1952. A taxonomic review of the genus *Actinidia*. J. Arnold Arbor. 33: 1–61.
———. 1976. Actinidiaceae. Pp. 585–591 in H. L. Li, T. S. Liu, T. C. Huang, T. Koyama & C. E. DeVol (editors), Flora of Taiwan. Vol. 2. Epoch Publishing, Taipei.
Liang, C. F. 1984. Actinidiaceae. Pp. 195–302 in K. M. Feng (editor), Flora Reipublicae Popularis Sinicae. Vol. 49(2). Science Press, Beijing.