Review of nine putative species of *Actinidia* from Guangxi, China

Xin-Wei Li¹,² & Jian-Qiang Li¹,*

¹) Herbarium (HIB), Wuhan Botanical Garden, The Chinese Academy of Sciences, Wuhan 430074, China (*corresponding author’s email: jianqiangl@hotmail.com)
²) Graduate School of the Chinese Academy of Sciences, Beijing 100039, China

Received 16 Dec. 2005, revised version received 25 Feb. 2006, accepted 23 Mar. 2006


Nine taxa of *Actinidia* previously recognized as species from Guangxi, China are taxonomically reviewed. We recognize four species and additionally one is treated as a dubious species.

Key words: *Actinidia*, nomenclature, taxonomy

Li *et al.* (2003) described nine species of *Actinidia* based on plants introduced into the kiwifruit repository of the Guangxi Institute of Botany, Guangxi Zhuangzu Autonomous Region and CAS, or grown from fruits bought in the market. However, the precise provenance of six of the supposed new species is not clear, and at least two of them came from a single place. In addition, from the descriptions and the figures, we suspect some taxa are conspecific with those previously described or described as distinct by Li *et al.* (2003), owing to the narrow species concept of those authors. We therefore examined the specimens in the herbarium of the Guangxi Institute of Botany, Guangxi Zhuangzu Autonomous Region and CAS (IBK) and observed carefully the plants in the repository from which the types were collected.

In the present review, we recognize only four new species of the nine, and an additional dubious one, of which fruits were not seen.

**Key to the Guangxi species of Actinidia**

1. Leaves abaxially glabrous .................. 1. *A. cylindrica*
2. Leaves abaxially stellate-tomentose at least when young ......................................................... 2
2. Stellate hairs dense on adult leaves .... 2. *A. fulvicoma*
3. Stellate hairs very sparse or glabrescent on adult leaves .................................................................... 3
4. Fruits oblong, pedicel thick .................. 4. *A. longicarpa*
5. Fruits subglobose to narrowly ovoid to oblong, pedicel slender .................................................. 4. *A. linguiensis*
6. Leaves glaucous abaxially on margin, costa and veins conspicuous and elevated abaxially; pith brown .......... 5. *A. persicina*
7. Leaves not glaucous, costa and veins subconspicuous abaxially; pith white .................................. 6. *A. rongshuiensis*

1. *Actinidia cylindrica* C.F. Liang

Actinidia albicalyx R.G. Li & M.Y. Liang, Guihaia  23(3): 193. 2003, syn. nov. — Type: China. Guilin, the Research Orchard, Guangxi Institute of Botany, September 2001 R. G. Li 0104 (Fr. IBK!).

The morphological characteristics of A. albicalyx, such as elliptical leathery older leaves with crenate teeth (tips of veinlets) along their margins, and cylindrical fruits, fit well the description of A. cylindrica (Liang 1984). When Li et al. (2003) published A. albicalyx, they compared it only with A. rubricaulis.

2. Actinidia fulvicoma Hance

J. Bot. 23: 321. 1885.

Actinidia diversicolora R.G. Li, Guihaia  23(3): 195. 2003, syn. nov. — Type: China. Guilin, the Research Orchard, Guangxi Institute of Botany, April 1993 M. Y. Liang & R. G. Li 9303, 9304 (Fl. IBK!); September 2001 R. G. Li 0105 (Fr. IBK!).

According to Li et al. (2003), the main differences between A. diversicolora and A. fulvicoma are that the former has red petals, which are white along the margins, and 3–5 calyces, while the latter species usually has white petals and 5 calyces. However, there are no clear-cut distinctions, and A. diversicolora does not merit taxonomic recognition.

3. Actinidia longicarpa R.G. Li & M.Y. Liang


From the type specimens it can be seen that A. rubrafilmenta is very similar to A. longicarpa, and although its fruits are shorter (2.3–3.1 cm) than those of the latter (2.8–4.7 cm) (Li et al. 2003), overall the two plants should be treated as conspecific. The fruits of A. longicarpa resemble those of A. eriantha, but A. longicarpa is distinct in that it is slightly pubescent only on the very young branchlets and petioles and the abaxial surfaces of mature leaves are almost glabrous. In A. eriantha the branchlets and petioles are densely lanose and the abaxial surfaces of the mature leaves are densely stellato-tomentose.

4. Actinidia linguiensis R.G. Li & X.G. Wang


The two taxa are similar in every respect and they were introduced from the same locality. Thus they are probably from a single population.

5. Actinidia persicina R.G. Li & L. Mo


Actinidia persicina R.H. Huang & S.M. Wang was invalid because a type was not designated. However, although re-application of A. persicina is undesirable, it is not actually forbidden.

6. Actinidia rongshuiensis R.G. Li & X.G. Wang


The species is similar to A. persicina, but the characters differentiating them in the key are
somewhat variable in other *Actinidia* species. Therefore much more material needs to be collected from the field and examined to confirm whether they are distinct taxa.

**Dubious species**


The type specimen does not include fruits and no fruits were seen by the present authors in the kiwifruit repository of the Guangxi Institute of Botany, Guangxi Zhuangzu Autonomous Region and CAS (IBK). We therefore treat it as a dubious species.

**Acknowledgements**

The study was supported by grants from the National Natural Science Foundation of China (39899400, 30499340, 30570120, 30370101), and the Chinese Academy of Sciences (KSCX-SW-122, 01035123). We are much indebted to the curator of IBK, who allowed us access to the specimens. Special thanks are also given to the supervisor of the kiwifruit repository in the Guangxi Institute of Botany, Guangxi Zhuangzu Autonomous Region and CAS, who allowed us to study the plants.

**References**
