

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

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

### 1. *Actinidia cylindrica* C.F. Liang

Fl. Reipubl. Popularis Sin. 49(2): 315. 1984.

*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 calyxes, while the latter species usually has white petals and 5 calyxes. However, there are no clear-cut distinctions, and *A. diversicolora* does not merit taxonomic recognition.

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

*Guihaia* 23(3): 198. 2003. — TYPE: China. Guilin, the Research Orchard, Guangxi Institute of Botany, April 1996 *M. Y. Liang & R. G. Li 9602* (Fl. IBK!); September 2001 *R. G. Li 0108* (Fr. IBK!).

*Actinidia rubrafilmenta* R.G. Li & J.W. Li, *Guihaia* 23(3): 199. 2003, *syn. nov.* (“*rubrafilmenta*”, orth. err.). — TYPE: China. Guilin, the Research Orchard, Guangxi Institute of Botany, April 1998 *M. Y. Liang & R. G. Li 9803* (Fl. IBK!); September 2001 *R. G. Li 0109* (Fr. IBK!).

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 linguensis* R.G. Li & X.G. Wang

*Guihaia* 23(3): 200. 2003. — TYPE: China. Guilin, the Research Orchard, Guangxi Institute of Botany, April 1998 *M. Y. Liang & R. G. Li 9805* (Fl. IBK!); September 2001 *R. G. Li 0110* (Fr. IBK!).

*Actinidia wantianensis* R.G. Li & L. Mo, *Guihaia* 23(3): 201. 2003, *syn. nov.* — TYPE: China. Guilin, the Research Orchard, Guangxi Institute of Botany, April 1998 *M. Y. Liang & R. G. Li 9802* (Fl. IBK!); September 2001 *R. G. Li 0111* (Fr. IBK!).

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

*Guihaia* 23(3): 197. 2003 (*non A. persicina* R.H. Huang & S.M. Wang, *J. Wuhan Bot. Res.* 13(2): 113–115. 1995, *nom. inval.*). — TYPE: China. Guilin, the Research Orchard, Guangxi Institute of Botany, April 1997 *M. Y. Liang & R. G. Li 9701, 9702* (Fl. IBK!); September 2001 *R. G. Li 0107* (Fr. IBK!).

*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

*Guihaia* 23(3): 196. 2003. — TYPE: China. Guilin, the Research Orchard, Guangxi Institute of Botany, May 2001 *R. G. Li 0102* (Fl. IBK!); September 2001 *R. G. Li 0106* (Fr. IBK!).

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

*Actinidia pentapetala* R.G. Li & J.W. Li, *Guihaia* 23(3): 194. 2003. — TYPE: China, Guilin, the Research Orchard, Guangxi Institute of Botany, May 2001 *R. G. Li 0101* (Fl. IBK!).

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.

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