

## Short comments on *Ardisia* (Myrsinaceae) of Eastern Asia

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**Abstract.** Four species of the genus *Ardisia* (Myrsinaceae) are treated. *Ardisia hokouensis* Yang is a new name for *Ardisia crassipes* Wu & Chen. *Ardisia villosoides* Walker is recognized as a synonym of *A. verbascifolia* Mez. *Ardisia kusukuensis* Hayata is reconfirmed as specifically distinct from *Ardisia crenata* Sims. *Ardisia miaoliensis* Lu is treated as a synonym of *Ardisia crenata* Sims.

**Key words:** *Ardisia*; Myrsinaceae; Species.

### Introduction

*Ardisia*, a large and difficult genus of the family Myrsinaceae, is geographically distributed mainly in both neo- and paleotropics. In his monograph, Mez (1902) recognized 235 species of the genus *Ardisia*, and subdivided them into 14 subgenera basing upon the habit, length of the filament and the style, number and arrangement of ovules, position of inflorescence, etc. In 1983, Stone pointed out that the genus had more than 300 species in the world. From 1984 to 1987, the author (Yang, 1987) did a revisionary study of the subgenus *Bladhia* strictly distributed in Asia. During the revisionary course, he studied original description of all Asian species of *Ardisia*, and examined the specimens collected throughout this distributional range, which are deposited at the herbaria of K, L, MO, TAI, and TAIF. Taxonomic and nomenclatural notes on four non-*Bladhia* species of *Ardisia* are given below.

#### 1. *Ardisia hokouensis* Yang, *nom. nov.*

*A. crassipes* Wu & Chen, Fl. Yunnan, 1: 351, pl. 82, f. 5-9. 1977, *syn. nov.*

Lundell (1968) described a new species *Ardisia crassipes* Lundell, for the flora of Panama. The same

specific epithet was also applied by Wu and Chen (Wu, 1977) for a distinct new species in Yunnan, Mainland China. It is therefore a later homonym and must be rejected.

#### 2. *Ardisia verbascifolia* Mez in Engl., Pflanzenr. 9 (IV. 236): 153, 1902.

*A. villosoides* Walker in Philipp. J. Sci. 73: 93. f. 17, 1940. *syn. nov.*

I have examined the type of *Ardisia verbascifolia* collected in Tonkin, Vietnam (*Balansa* 3937 at K), and that of the species *A. villosoides* collected in Hainan, China (*F. C. How* 72747 at US). The similarity of the leaves, flowers, and inflorescences between the two species strongly supports that these two species are conspecific.

#### 3. *Ardisia kusukuensis* Hayata, Ic. Pl. Form. 5: 90, 1915.

*A. crenata sensu* Li, Woody Fl. Taiwan 712. 1963. *pro parte* & in Fl. Taiwan 4: 50, 1978. *pro parte; non* Sims.

In 1921, Nakai placed this species under the synonymy of *Bladhia crispa* var. *taquettii* Lévl. In 1959, Walker treated this as an uncertain species in his revision of Taiwan Myrsinaceae. Basing upon Nakai's treatment, Li (1963, 1978) placed this species in the

synonymy of the species *Ardisia crenata*, which was followed by Chen (1979) in his revision of the Myrsinaceae of China. The discrepancy in opinions is apparently resulted from lacking of specimens for examination.

In recent years, specimens collected at Nan-ren-shan (*Lu 13855* at TAIF) and at Keng-ting (*Lu 13821* at TAIF) that agree with the original description of this species confirmed its distinctiveness. The short and hairy peduncle as well as the linear-triangular calyx lobes serve readily to distinguish this species from *Ardisia crenata*.

4. *Ardisia crenata* Sims in Curtis, Bot. Mag. 45: pl. 1950. 1818.

*A. miaoliensis* Lu in Quart. Journ. Chinese For. 10: 119. Fig. 1 and 2. 1977.

According to Lu (1977), *A. miaoliensis* is closely related to *Ardisia crenata* Sims and *Ardisia bicolor* Walker, but can be distinguished from the former by having purplish color and the lack of raised-punctate glands on the undersurface of fresh leaves and distinguished from the latter by the lack of raised-punctate glands and the leaves purplish beneath when young. However, a transplanting experiment of *Ardisia miaoliensis* and *Ardisia crenata* has been made in past several years. The results showed that the purplish color may or may not be found in every ages of leaves of *Ardisia miaoliensis*. Additionally, the raised-punctate glands could be also found on the leaves of the species.

As regards to *Ardisia bicolor*, Chen (1977) treated it as a variety of *Ardisia crenata* in terms of their close similarity and the difference that the former has purplish leaf undersurface, pedicels, calyx and petals. Considering the characters of *Ardisia bicolor* and the results of transplanting experiment, I hereby treat *Ardisia miaoliensis* as a synonym of *Ardisia crenata*.

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本文處理紫金牛屬四種植物；粗梗紫金牛之新學名爲 *Ardisia hokouensis* Yang，長毛紫金牛之新學名爲 *Ardisia verbascifolia* Mez，高士佛紫金牛 (*Ardisia kusukuensis* Hayata) 確認為不同於硃砂根 (*Ardisia crenata* Sims) 之種類，苗栗紫金牛 (*Ardisia miaoliensis* Lu) 則爲硃砂根之異名。