

Notes on Some Species of Vascular Plants of Taiwan

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ABSTRACT: The changes of nomenclature and/or taxonomic ranks are made for some taxa of *Eurya*, *Taxillus*, *Scurrula*, and *Quercus* of Taiwan. *Eurya nitida* Korthals var. *nanjenshanensis* Hsieh, Ling and Yang is elevated as *Eurya nanjenshanensis* (Hsieh, Lin and Yang) Yang and Lu, *stat. nov.*; *Eurya taitungensis* Chang is reduced as *Eurya glaberrima* Hayata var. *taitungensis* (Chang) Yang and Yang, *stat. nov.*; *Eurya acuminata* DC. is excluded from the flora of this island; *Scurrula* L. is retained instead of being merged to *Taxillus* van Tiegh., and *Taxillus tsai* Chiu is combined as *Scurrula tsai* (Chiu) Yang and Lu *comb. nov.*; *Scurrula theifer* (Hayata) Danser is recognized as a synonym of *Scurrula ritozanensis* (Hayata) Danser.

KEY WORDS: *Eurya*, *Scurrula*, *Taxillus*, Taiwan.

INTRODUCTION

In the course of studying the flora of Taiwan, we realized a necessity to make nomenclatural and/or taxonomic changes for some taxa. The changes are as follows.

TAXONOMIC TREATMENT

1. ***Eurya nanjenshanensis*** (C.-F. Hsieh, L.-K. Ling and S.-Z. Yang) S.-Z. Yang and S.-Y. Lu, *stat. nov.*--*Eurya nitida* Korthals var. *nanjenshanensis* C.-F. Hsieh, L.-K. Ling and S.-Z. Yang, Fl. Taiwan ed. 2. 2: 682. 1996.

Hsieh *et al.* (1996) described a new variety, *Eurya nitida* Korthals var. *nanjenshanensis* C.-F. Hsieh, L.-K. Ling and S.-Z. Yang. They distinguished it from the typical variety by having thicker leaves that are frequently obovate-orbicular with an obtuse and emarginate apex. In recent study, we noted a good character, i. e. *ca.* 10 stamens in male flowers, that serves readily to differentiate it from *E. nitida* (*ca.* 15 stamens in male flowers). Additionally red-glandular calyx margin of the species is also diagnostic. A combination of these characters in Hsieh *et al.*'s "variety" strongly supports that it is a distinct species.

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Pingtung: Nanjenshan, *Li 410* (Holotype, TAI), *Cheng 13214* (TAI), *C. E. Chang 3806 & 3892* (PPI).

2. ***Eurya glaberrima*** Hayata var. ***taitungensis*** (C.-E. Chang) Y.-P. Yang and S.-Z. Yang, *stat. & comb. nov.*--*Eurya taitungensis* C.-E. Chang, *Bull. Taiwan Prov. Pingtung Inst. Agr.* 4: 174. *pl. 1.* 1962.

Eurya taitungensis C.-E. Chang was diagnosed by C.-E. Chang (1962) as having pubescent branches and leaves, and very short usually 4-fid style in flowers. Compared with *Eurya glaberrima* Hayata, the species is slightly different from it in the vesture and the usually 4-fid (occasionally 3-fid) style. They are very similar in leaf shape as well as very short style. It is reasonable to treat *E. taitungensis* as a variety of *E. glaberrima*.

The variety was mentioned by Chang (1962) and Hsieh *et al.* (1996) with a distributional range in Taitung and Hualien Counties. Because there is only one specimen, i. e. the holotype (*Chiu 58*, PPI), known by us, the range is doubtful. On the other hand, the variety needs further study.

Hualien: Chingshuishan, *Chiu 58* (Holotype, PPI).

3. ***Eurya acuminata*** *auct. non* DC.: C.-F. Hsieh, L.-K. Ling and S.-Z. Yang, *Fl. Taiwan ed. 2.* 2: 679. 1996.

Citing *Yang 28001* (TAI), Hsieh *et al.* (1996) reported the occurrence of *Eurya acuminata* in southern Taiwan. However, the pubescent ovary in the specimen reveals that it belongs to *E. strigillosa* Hayata.

The pubescence in leaves and stems of the species varies depending on various elevation. In the middle elevation, the young stems and the beneath of leaves are covered with dense hirsute hairs; but, in the low elevation, the young stems and the beneath of leaves are with somewhat scattered sericeous hairs.

4. ***Scurrula tsai*** (Chiu) Y.-P. Yang and S.-Y. Lu *comb. nov.*--*Taxillus tsai* Chiu, *Taiwania* 41(2): 164. 1996.--*Taxillus parasiticus* (L.) Chiu, *Taiwania* 41(2): 159. 1996, *excl. basion.*

Chiu (1996a) merged *Scurrula* L. with *Taxillus* van Tiegh., because the difference between the two genera does not seem to be outstanding. She selected *Taxillus* instead of *Scurrula* since the International Code of Botanical Nomenclature (Stafleu *et al.*, 1972) treated *Scurrula* as a synonym of *Loranthus*. In the treatment, she transferred the species of *Scurrula* of Taiwan to *Taxillus*, and made new combinations for some of the species. Although treated as a (taxonomic) synonym of *Loranthus* in ICBN, *Scurrula* has been referred as distinct by many contemporary taxonomists, e. g. Kiu (1988) and Barlow (1991), because of morphological distinction in floral structures. It is possible that Chiu also realized their difference, as reflected by her following publication (Chiu, 1996b).

As to *Scurrula* and *Taxillus*, we do not intend to delimit them. We would like to point out that, if the two genera are congeneric, then *Scurrula* must be retained, because it was established by Linnaeus in 1753 prior to *Taxillus* by Tieghem in 1895. On the contrary, if *Scurrula* and *Taxillus* are distinct, *Scurrula*'s type species, *S. parasitica* L., should be not

combined into *Taxillus parasiticus* (L.) Chiu. Perhaps, Chiu did not notice that *S. parasitica* is the type species of the genus.

Scurrula parasitica is characterized by having pyriform fruit with an attenuate stipe-like lower part (Kiu 1988). In the examined specimens of *Scurrula* and *Taxillus* in the herbaria of Taiwan, we failed to find any with such characters. The specimens included *Ou et al.* 7717 and *Ou et al.* 8956, which were cited by Chiu. The latter specimen was also cited by Liu *et al.* (1988) from Taiwan. We have also examined some other specimens, including *Chang* 18206, *Ou et al.* 10385 et 10390, which were referred to *S. parasitica* by Liu *et al.* (1988). The similarity in base and pubescence of leaves, length of flowers and shape of fruit between so-called *S. parasitica* and *Taxillus tsai* suggest them conspecific. In addition, the club-like fruit appearing in the species prompts us transfer *Taxillus tsai* Chiu to *Scurrula*.

Because of the additional specimens, the description of the species is amended as follows: leaves coriaceous or subcoriaceous 4.5-7.5 cm long, 2-4 cm wide.

Nantou: Lienhuachih, *Chiu et al.* 2554. (Holotype & isotype, TNM). **Taichung:** Chuyungshan, *S. C. Liu & K. L. Chen* 10482 (TCF), *Ou et al.* 10385 & 10390 (TCF). **Pingtung:** Tahanshan, *Ou et al.* 7717 (TCF); Nanjenshan, *C. E. Chang* 2363 (PPI). **TAITUNG:** Yenping logging trail, *Ou et al.* 8956.

5. *Scurrula ritozanensis* (Hayata) Danser, Bull. Jard. Bot. Buit. III. 10: 353. 1929--*Loranthus ritozanensis* Hayata, Icon. Pl. Formos. 5: 184. 1915--*Loranthus theifer* Hayata, Icon. Pl. Formos. 5: 186. 1915--*Scurrula theifer* (Hayata) Danser, Bull. Jard. Bot. Buit. III. 10: 353. 1929.

We agree with Li (1963) and Chao (1976) that *Scurrula theifer* (Hayata) Danser is a synonym of *S. ritozanensis* (Hayata) Danser. We could not find any significant difference between type specimens of the two species concerned. While indicating that it is difficult to distinguish types of the two species morphologically, Liu *et al.* (1988) claimed that the two species are separable by flavonoids profile. The difference in flavonoids profiles of the two species does not seem to be significant to us taxonomically. Therefore we consider them as conspecific. The obovoid fruit of the species leads us to treat it as a member of *Scurrula*.

Hsinchu: Litungshan, *Kawakami s. n.* in 1913 (Isotype, TAIF). **Nantou:** Aowanta, *Lu et al.* 9185; Hueyshuen, *Chen et al.* 9800. **Taichung:** Takeng, *K. L. Chen* 8507. **Pingtung:** Suchungchi, *Sasaki s. n.* in 1911 (Isotype of *Loranthus theifer* Hayata).

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台灣數種維管束植物註

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摘 要

台灣產柃木屬 (*Eurya*)、鈍果桑寄生屬 (*Taxillus*) 和梨果桑寄生屬 (*Scurrula*) 中數種植物學名行以下之改變。南仁山柃木 (*Eurya nitida* Korthals var. *nanjenshanensis* Hsieh, Ling & Yang) 由變種升為種 (*Eurya nanjenshanensis* (Hsieh, Ling and Yang) Yang and Lu); 台東柃木 (*Eurya taitungensis* Chang) 降為厚葉柃木之變種 (*Eurya glaberrima* (Chang) Yang and Yang); 銳葉柃木 (*Eurya acuminata* DC.) 不分佈於台灣; 梨果桑寄生屬 (*Scurrula*) 應予保留, 而不併於鈍果桑寄生屬 (*Taxillus*) 中, 因而蓮華池寄生 (*Taxillus tsai* Chiu) 應併為 (*Scurrula tsai* (Chiu) Yang and Lu); 埔姜桑寄生 (*Scurrula theifer* (Hayata) Danser) 為李棟山桑寄生 (*Scurrula ritozanensis* (Hayata) Danser) 之異名。

關鍵詞：柃木屬、鈍果桑寄生屬、梨果桑寄生屬、臺灣。

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