

NEW ADDITIONS TO THE ORCHID FLORA OF TAIWAN

TSAN-PIAO LIN⁽¹⁾

Abstract: Two species of native orchids are listed as new for Taiwan. They are *Corybas taiwanensis* T. P. Lin et S. Y. Leu and *Bulbophyllum rubrolabellum* T. P. Lin. The genus *Corybas* appears as newly recorded to Taiwan. A Chinese name is given for each species and two detailed line drawings are presented.

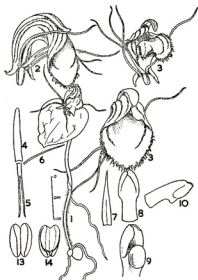
S. Y. Leu made a collecting trip to Nachiehshan of Taoyuan Hsien (桃園縣界結山) on Aug. 4, 1974 where he found a very small and unusual orchid growing on a shaded mossy cliff in a *Chamaecyparis* forest at about 1,400 m. After much study the author concluded that this was new to Taiwan and belonged to the genus *Corybas* which had not been previously reported from Taiwan. *Corybas* is a large genus, with about 60 species, extending from the Himalayas eastward to the Philippines and south to Australia and New Zealand. The Philippine Islands is the nearest station where *Corybas* has been found, but none of the Philippine species are exactly like ours. The most similar species to ours being *Corybas merrilli* Ames, but ours differs from that in that the lip has a fringed margin and the lateral sepals are coherent.

Corybas taiwanensis T. P. Lin et S. Y. Leu, sp. nov. Plate 1 紅蕊蘭

Plantula nana; tubera solitaria, globosa, 3-4 mm longa, 3 mm lata; caulis tenuis, c. 3 cm longis, uni-vagina membranaceo arcte amplexente ornatus; folium cordato-ovatum, acutum, 1.5 cm longum 1.6 cm latum, reticulato-nervatum, utrinque glabrum, membranacea; pedunculus brevis 3 mm longis; bractea lanceolata; flos solitarius, fere sessilis, pallido-rubescens; sepalum intermedium linearis, apice rotundatum, 1.3 cm longum 2 mm latum, curvatum; sepala lateralia 1.3 cm longa, filiforma, basi connatis, partibus cohaerentis 3 mm longis; petalia filiforma, 1 cm longa; labellum columnam amplexens, ad imum scrotiformi-bicalcaratum, suprene recurvatum; limb rotundat-ellipticus, fimbriatus; columna oblonga, 3.5 mm longa; pollinia 2, 1.2 mm longa; stigma protrusa, cupulata.

Small terrestrial herb; roots slender; tuber roundish, 3-4 mm by 3 mm; stem erect, terete, clearly divided into 2 separate parts with a node between them; the subterranean part pilose, 1.5 cm long, 1-1.2 mm in diameter; the above ground portion glabrous, about 1.7 cm long, 1.5 mm in diameter and with a scale-like cataphyll on its node; leaf solitary, cordate, acute, 1.5 cm by 1.6 cm, with reticulate venation; flower terminal, solitary, almost sessile, light violet-red; bract lanceolate, acuminate, 5 mm long; ovary short, about 3 mm long; upper sepal linear, incurved, 1.3 cm by 2 mm, obtuse; lateral sepals located on the ventral side of the lip, coherent at base; coherent part 3 mm long, the divergent part 1 cm long, filiform; petals filiform, 1 cm long; lip rather large, tubular, rotund-elliptic when flattened out, 1.7 cm by 1 cm, dilated into a broad limb strongly recurved in the medium region; disc marked with several parallel dark red striations and fimbriate on the front margin; spur deeply bilobed to form 2 saccate horns, 3 mm long; column oblong, 3.5 mm long; pollinia 4,

(1) 林淵標 Graduated student of the Research Institute of Botany, NTU; and presently an assistant in Silviculture Division, Taiwan Forestry Research Institute.

Plate 1. *Corybas taiwanensis* T. P. Lin et S. Y. Lee

in pairs, granular, 1.2 mm long, yellow; viscid disc elliptic; stigma protruding, cupular.

TAOYUAN: Nachiehshan, S. Y. Lee 2093, Aug. 4, 1974, deposited in the herbarium of National Taiwan University (type, TAI).

Bulbophyllum rubrolabellum T. P. Lin, sp. nov. Plate 2 紅心豆蘭

Epiphytica; pseudobulbis compactis, ovoideis, 8-9 mm longis 6-7 mm latis, 1-foliatis; folia oblonga, coriacea, 2.5-3.5 cm longa 8-10 mm lata, acuta; scapus e basi pseudobulbi ascendens, 1 cm longus, deorsum 2-3-squamatus, apice floribus 6-8 in umbellam dispositus; pedicellis 2.5 mm longis; flos c. 3.5 mm longus; sepala valde subaequalia, pallido-flava, ovata, 3.5-4 mm longa 1.6-2 mm lata, apice acuminata; petala pallido-flava, elliptica, 1.5 mm longa 0.6 mm lata, acuta; labellum cornutum, deorsum valde recurvatum, rubrum, 2.8 mm longum; columna pallido-flava, 1 mm longa, antice 2-alata, 0.6 mm longa, basi in pedem bene evoluta; pollinia 2, ovoideia, 0.4 mm longa, flava.

Small epiphyte; pseudobulbs close together, ovoid, 8-9 mm by 6-7 mm, greenish; leaf solitary, oblong, 2.5-3.3 cm by 8-10 mm, acute, coriaceous; scape arising from the base of pseudobulb, about 1/3 length of the plant, to 1.5 cm long; sheath-bracts 2-3; flowers 6-8, in a compact umbel, facing all around, not resupinate, whitish-yellow; pedicel and ovary 2.5 mm long, longer than the floral bract; sepals sub-equal,

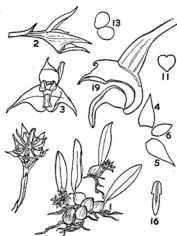


Plate 2. *Bulbophyllum rubrolabellum* T. P. Lin

ovate, 3.5-4 mm by 1.6-2 mm, acuminate; petals elliptic, 1.5 mm by 0.6 mm, acute; lip tongue-shaped, 2.8 mm long, red, recurved, hinged to the end of the column-foot, with minute papillae covering the surface; column short, whitish-yellow, about 1 mm long, with forward-pointing narrow arms, about 0.6 mm long; pollinia 2, ovoid, 0.4 mm long, yellow.

MIAOLI: Yangmeishan, (苗栗縣 楊梅山) T. P. Lin 129, Oct. 25, 1972, (type, TAI) an epiphyte on trunk of tree about 700-1,000 m. Nandawushan, (南大武山) T. P. Lin 234, Sept. 10, 1974.

This is the first species of *Bulbophyllum* that we have found which has its flowers arranged in a terminal head-like inflorescence.

Explanation of Plate

- | | |
|---------------------------------|-----------------------------|
| 1. plant body and inflorescence | 2. side view of flower |
| 3. front view of flower | 4. upper sepal |
| 5. lateral view of petal | 6. petal |
| 7. floral bract | 8. dorsal view of column |
| 9. ventral view of column | 10. side view of column |
| 11. dorsal view of anther cap | 13. dorsal view of pollinia |
| 14. ventral view of pollinia | 16. top view of lip |
| | 19. column and lip |