

Shao-shun YING\*: **Miscellaneous notes on flora  
of Taiwan (10)\*\***

應紹舜\*: 台湾植物雜報 (10)

91) **Bulbophyllum derchianum** Ying, sp. nov (Fig. 1)

Epiphyta. Caulis repens, gracillimus teres 1-1.2 mm in diametro, pseudobulbi absentes, glabri, dense foliati. Folia crassissima, rotundulata vel ovata, 3-5 mm longa, 2.5-4.5 mm lata, apice obtusa cum apiculato, basi cordata, supra virida vel flavo-virida, subtus purpureo-punctata, utraque glabra vel subtus paulum pubescentia. Petioli absens vel breve, 0.2 mm longi.

Racemi axillares 1-2 florati, 1-1.5 cm longi graciles basi vaginati; vagina 0.8-1.2 mm longa; pedicelli basi, 1-bracteati, bracteis ovato-triangularibus, 0.6-0.8 mm longis, 0.5 mm latis, apice acutis, pedicellis cum ovario 4-5 mm longis, glabris. Sepala subaequalia, alba, ovato-oblonga vel oblonga, sapalum intermedium 4-5 mm longum, 2.5-3 mm latum, apice acutum, basi plus minus contractum, glabrum, sapala lateralia aequiformia basi dilata cum pede columnae connexa, mentum 1-1.5 mm longum formantia; petala ovata vel oblonga, 2-3.0 mm longa, 1-1.5 mm lata, apice obtusa, basi plus minus contracta. Labellum ovato-triangularatum, 5-6 mm longum, 3-4 mm latum, integrum, apice acutum, basi callosum, basi cum pede columnae longe articulato-producto. Columna brevissima, 1 mm longa, basi alata Rostellum spathulatum, apice rotundatum, 0.4-0.5 mm longum, 0.2-0.3 mm latum. Pollinia globosa, viscidium minutum, flavum, 0.1-0.2 mm longum.

Habitat. Der-chi (德基) to Ching-shan (青山), Taichuang county, leg. Ying, S. S. s. n., May 4, 1988 (NTUF—holotype)

The species is very near to *B. tokioi* Fukuyama form. *alboviride* Fukuyama, but differs by small leaves which are usually purple or dark purple in colour at underface and by rather larger and white flowers. It is characterized by 1) leaves rather small, usually 3-5 mm long, 2.5-4.5 mm wide, and always with

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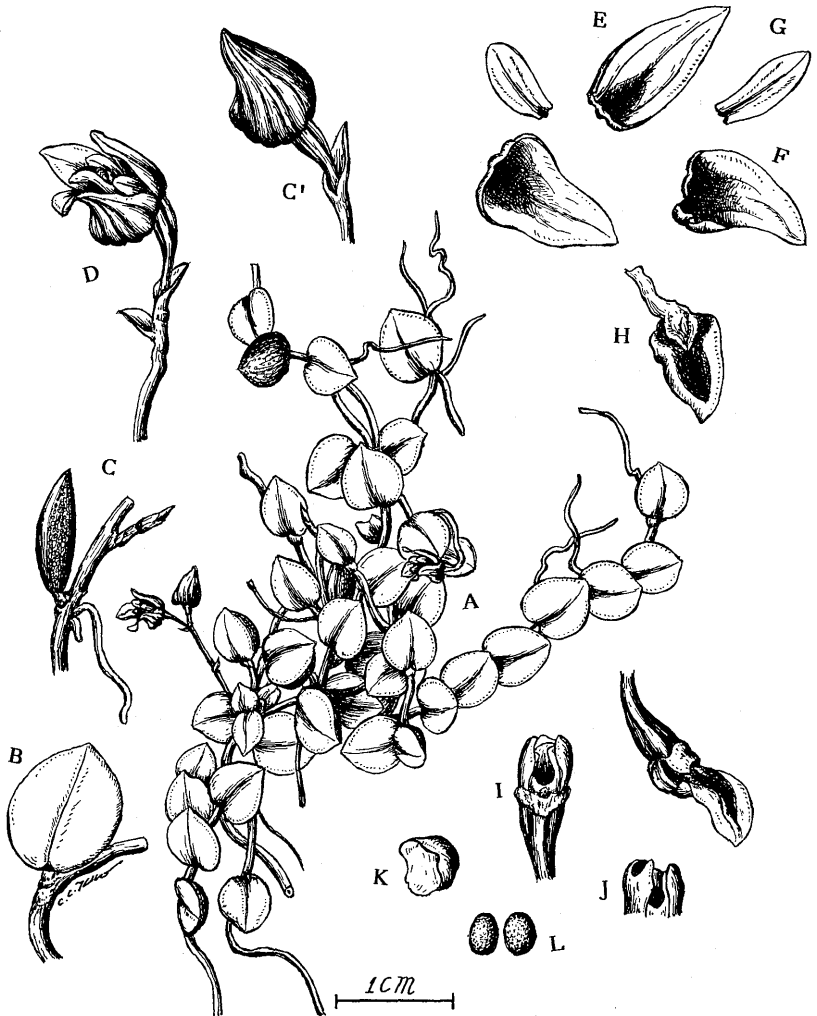


Fig. 1. *Bulbophyllum derchianum* Ying. A. the plants. B. a leaf, showing surface. C. a leaf, showing beneath. C'. flower bud. D. flower. E. dorsal sepal. F. lateral sepals. G. petals. H. column-foot and lip. I. column. J. upper part of the column. K. operculum. L. pollinia.



Fig. 2. *Dendrobium tosaense* var. *chingshuishanianum* Ying. A. the plant. B. flower. C. dorsal sepal. D. lateral sepal. E. petal. F. lip. G. column and ovary. H. anther. I. pollinia.

purple or dark purple colour at undersurface, 2) flowers 1-2 on a scape, pure white, rather larger than that of *B. tokioi* form. *alboviride*, 3) the lip ovate-triangular in shape, acute at apex, with a callus at base and pollinia globose, 4) rostellum spatulate, rounded at apex, 0.4-0.5 mm long, 0.2-0.3 mm wide; viscidium small, 0.1-0.2 mm long, yellow.

92) ***Dendrobium tosaense*** Makino var. ***chingshuishanianum*** Ying, var. nov. (Fig. 2)

A typo differt, caulibus robustis erectis, floribus plerumque 1-3, luteolis vel cerinis, labello majore trilobato basi calloso, lobis lateralibus auriformibus erectis, lobo terminale ovato basi breviter roseo-striato.

Habit: Chingshuishan (清水山), alt. 800 m, Hualien county, leg. Ying, S.S. s. n., April 5, 1988 (NTUF—holotype).

The variety is near to *D. tosaense* Makino, but differs by pale waxy fewer flowers at base of terminal lobe of lip and pale reddish pollinia which are only 2 in number.

The variety is characterized by 1) stem robust, erect, not pendulous, 2) flowers fewer, usually solitary or 2-3, pale yellow or waxy yellow in colour, 3) lip usually larger, with a yellow and large callus at base, 3-lobed; the lateral lobes auriform, erect; terminal lobe somewhat ovate, and with few pale reddish short stricts at base, 4) column short, usually emarginate and pink in colour at apex; column-foot elongate, with numerous reddish stricts but with a dark red speck on each side upward, 5) pollinia only 2, I cannot dismember each pollinarium into 2 pieces, since it might be too young.

93) ***Disporum taiwanense*** Ying, sp. nov. (Fig. 3)

Herba perennis, erecta, 60-120 cm alta. Caulis 4-6-ramosus, glaber, ramis elongatis, 20-40 cm longis, glabris, foliatis. Folia oblonga vel oblongo-lanceolata, 8-12 cm longa, 3-4 cm lata, apice acuminata vel acuminato-caudata, basi obtusa vel rotundulata, utraque glabra, membranacea, distincte 5-nervosa, inter nervos paralleliter multi-nervulosa, nervi utrinque prominenter elevati, brevissime petiolata, petiolis 5-10 mm longis, glabris.

Flores 3-5, umbellati, 1-1.5 cm longi, 8-9 mm in diametro, terminales; umbellis sessilibus, pedicelli 1.2-2.8 cm longi, stricti, glabri; perianthium extus virido-flavum intus superne rubrum, 1.2-1.5 cm longum, 8-12 mm in diametro, segmentis 6, aequalibus, oblongis vel oblongo-lanceolatis, 1.2-1.5 cm longis, 4-5 mm latis, apice acutis, basi plus minus contractis, extus pubescentibus, superne dense glandiferis, intus glabris; basi calcaratis; calcaribus 1.5 mm longis, 1 mm



Fig. 3. *Disporum taiwanense* Ying. A. the plant. B. flower. C. perianth and stamens expanded. D. outer series of perianth segment. E. inner series of perianth segment. F. glandular dots on the upward of perianth segments. G. stamens. H. pistil. I. stigma and style, showing glandular dots.

latis, obtusis. Stamina 6, segmentis oppositis, filamentis 5-6 mm longis; antheris oblongis, 2.5-3 mm longis, 1 mm latis, connectivis apice brevissime obtusopunctatis; ovarium oblongum, 2-2.5 mm longum, 1-1.5 mm latum, apice obtusum, basi sessile. Stylus elongato-columnaris, 7-8 mm longus, glaber superne dense glandiferus, apice dilatatus, 3-fissus, ramis 0.3 mm longis.

Habitat Taroku (太魯閣) to Talishih (大禮), Hualien county, leg. Ying, S. S. s. n., April 4, 1988 (NTUF—holotype).

The species resembles *D. cantonense*, but differs by the perianth usually reddish upward, especially on inner surface, not completely reddish, and the leaf of different size and shape. It is characterized by 1) leaf-petioles usually reddish, 2) the perianth usually yellow on outer surface and reddish upward on inner surface and dense glandular dots in the upper part on outer surface of segments, 3) the ovary glabrous with elongate style; the style usually with dense papillose or glandular dots upwards; stigmas shallowly 3-lobed.

94) ***Disporopsis taiwanensis*** Ying, sp. nov. (Fig. 4)

Rhizoma teres, repens, 8-12 cm longum, remote radiferum. Caulis ascendens, 20-35 cm longus, basi squamosus, squamis inferioribus triangularibus brevibus amplexicaulibus, superioribus elongatis, basi tubulato-vaginatibus, apice acutis, glabris; a basi usque ad 2/3 altitudinem efoliatus, sursum foliatus. Folia alterna, ovato-lanceolata vel oblongo-lanceolata, 9-12 cm longa, 2.5-3 cm lata, apice acuminata vel breviter caudata, basi obtusa, margine integra, tenuiter chartacea, utriusque glabra, petiolis 1-1.5 cm longis.

Flores axillares solitariae, nutantes; pedicellis glabris 1-1.5 cm longis, sub apicibus articulatis; perianthium campanulatum, extus album intus atro-rubrum, 1.2-1.6 cm longum, 5-7 mm in diametro, apice 6-lobatum, tubo 8-9 mm longo; lobis 2-seriatim dispositis, exterioribus late triangularibus, 2.5-3 mm longis, apice acutis, interioribus spatulatis, 2-2.8 mm longis, apice obtusis, pubescentibus. Stamina 6, lobis perianthii alterna, ad coronam adnata, filamentis valde dilatatis, 6-8 mm longis, 3.5-4.5 mm latis, glabris, usque ad medium se connexis coronam formantibus, apice 2-lobato, lobis triangularibus, acutis, 1.5-1.8 mm longis, 1 mm latis, antheris oblongis 1.5-2 mm longis, 1.5 mm latis, apice obtusis, basi cordatis. Ovarium ovoideum, 3-4 mm longum, 2-2.5 mm latum, 3-loculare, glabrum. Stylus columniformis 1.5-2 mm longus, glaber, apice stigmatoso-pubescentis.

Habitat. Southern cross Highway near to Li-Soo (利松), Taitung County, leg. Ying, S. S. s. n. May 15, 1988 (NTUF—holotype).



Fig. 4. *Disporopsis taiwanensis* Ying. A. the plant. B. flower. C. perianth and corona expanded. D. perianth-segments with portion of corona with anthers. E. perianth segments. F. portion of corona with anthers. G. pistil. H. immature fruit.

The species is near to *D. arisanensis*, but differs by ovate-lanceolate leaves, dark reddish inner surfaces of perianth and larger flowers.

95) *Trillium taiwanense* Ying, sp. nov. (Fig. 5)

Herba perennis. Rhizoma repens, crassum, teres, 2-3.5 cm longum, basi

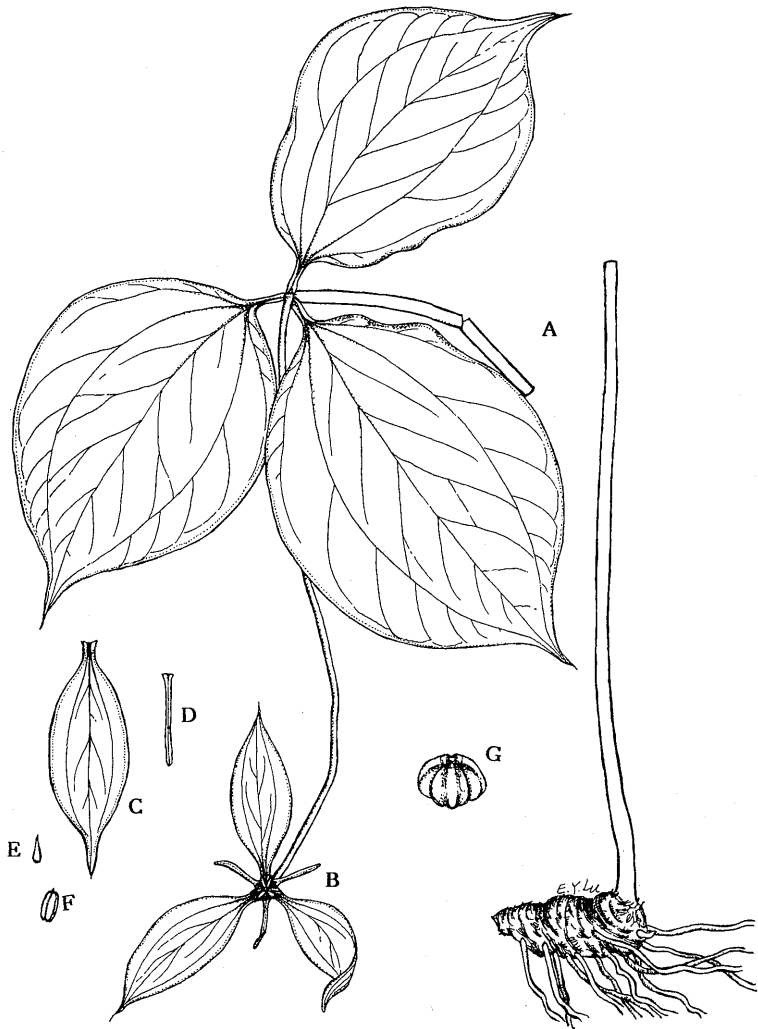


Fig. 5. *Trillium taiwanense* Ying. A. the plant. B. flower. C. outer series of perianth segment (sepal). D. inner series of perianth segment (petal). E. filament. F. anther. G. ovary.



radices filiformes emittens. Caulis 15-22 cm altus, teres, glaber, inferius 1-2 mm in diametro, haud ramosus, simplex, erectus, apice foliis 3-verticillatis. Folia brevi-petiolata, ovata vel lato-ovata, 7-9 cm longa, 4.5-5.5 cm lata, apice obtusa cum breviter cauda, basi obtusa vel rotundata, membranacea, margine integra, utraque glabra, 3- vel 5-nervia, supra distincte tenuiter elevata subtus distincte elevata, petiolis 1-1.2 cm longis, atro-rubris, glabris.

Flores solitarii, terminales 3-5 cm in diametro, glabri, pedunculis erectis, rectis teretibus 12-14 cm longis. Sepala 3, ovato-lanceolata vel late lanceolata, 3.2-3.5 cm longa, 1-1.2 cm lata, apice acuminata vel acuta, basi cuneata, glabra margine integra. Petala 3, linearia vel late linearia, 1.4-1.9 cm longa, 1-1.5 mm lata, apice obtusa, basi plus minus contracta, margine integra. Stamina 6, filamentis filiformibus, 2-3 mm longis, glabris, antheris adnatis oblongis, 1-1.5 mm longis, apice apiculatis. Ovarium depresso-ovoideum, 5.5-6.5 mm latum, 2.5-4 mm longum, apice obtusum Stigmata trifida

Habitat. Mt. Chingshuishan (清水山), alt. 1,600-1,700 m, Hualien county, leg. Ying, S.S. s.n., June 26, 1988 (NTUF—holotype).

The species is near to *T. smallii*, but differs by the leaves with short petioles and linear or broadly linear petals.

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台湾産のラン科とユリ科植物の 4 種と 1 変種を新たに記載した。