$Dendrobium \times usitae$ (Orchidaceae) — A New Natural Hybrid from the Philippines

by

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遊川知久*: Dendrobium ×usitae-フィリピン産ラン科の一新分類群

Dendrobium ×usitae Yukawa, nothosp. nov. TYPE: PHILIPPINES. Calayan Islands, Babuyan Island, 500-700m, April 1994, V. T. Usita s. n. (Holotype: TNS).

Hybrida e *D. bulleniana* Rchb. f. et *D. goldschmidtiana* Kraenzl., floribus auranti-purpureis cum striis purpureis, callo supra labellum proximali subacuto, rostello obtuso-triangulari.

Epiphytic plant to 57cm tall. Pseudobulbs fascicled, pendulous, slender, attenuate below, many-noded, sulcate, 19-57cm $\log \times 0.7-1.2$ cm wide, covered with sheaths. Leaves submembranous, lanceolate, acute, unequally bilobed at apex, 5.7-8.8cm $\log \times 1.7-2.6$ cm wide. Inflorescences short, subglobose, 11- to 17-flowered, on defoliated stems at nodes. Flowers widely-opening, 19 to 19.5mm long, purplish orange with purple striations; pedicel and ovary slender, 13 to 14mm long. Dorsal sepal erect, oblong-ovate, subacute, 8.5 to 9.5mm $\log \times 3.5$ to 4mm wide, 5-nerved; lateral sepals oblique, acute, 8.5 to 9mm $\log \times 5$ to 5.5mm wide, 7-nerved; mentum obtuse, 10mm long. Petals lanceolate-obovate, acute, 7 to 8mm $\log \times 2.5$ to 3.5mm wide, 5-nerved. Labellum lanceolate-obovate, subacute, 15 to 15.5mm $\log \times 4.5$ to 5mm wide, 7-nerved; callus basal, hippocrepiform, subacute, pointing towards claw. Column yellowish, short, about 4mm long; clinandrium side wings truncate, dorsal filament acute; rostellum triangular, obtuse; operculum yellowish, cucullate; pollinia 4 in 2 pairs.

ETYMOLOGY: The specific epithet honours Villamor T. Usita of Quezon City, Philippines, who discovered this species.

In April 1994, Mr V. T. Usita collected a novel plant from Babůyan Island of the Calayan Islands, the northern part of the Philippines. Albeit its close relation to *Dendrobium bullenianum* and *D. goldschmidtianum*, this plant is easily distinguished from both species by its flower colour of purplish orange with purple striations, by its subacute basal callus of the labellum, and by its obtuse-triangular rostellum. The author investigated many individuals of *D. bullenianum* and *D. goldschmidtianum* and concluded that each discriminating character is distinct among the taxa discussed. As shown in Table 1, these characters as well as quantitative characters such as the number of flowers per inflorescence and the flower length are intermediate between *D. bullenianum* and *D. goldschmidtianum*. Furthermore, only a few individuals of this type of plants are known from the locality, where it occurs with *D. bullenianum* and *D. goldschmidtianum*; the proportion of the latter two species in this locality is approximately 40 and 60%. Consequently, this intermediate plant is interpreted as a result of

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Table 1. Comparison of diagnos	tic characters among Dendrobium	bullenianum, $D. \times usitae$ and $D.$
goldschmidtianum		

	D. bullenianum	D. $ imes$ usitae	D. goldschmidtianum
Flower colour	orange with red stria- tions	purplish orange with purple striations	purplish red with dark purple
Labellum callus	obtuse	subacute	acute
Rostellum	acute	obtuse	truncate
Flower length	1.5-1.6cm	1.9-1.95cm	2.5cm
Flower number	21-32	11-17	5-9

hybridization between D. bullenianum and D. goldschmidtianum; the author thus propose a binominal name, Dendrobium \times usitae Yukawa. Salient differences between D. \times usitae and its parents are illustrated in Fig. 1.

Incidentally, taxonomic confusion exists in both parent species. In general, *D. bullenianum* is grown under a synonymous name, *D. topaziacum* Ames. On the other hand, Christenson (1994) examined the recently-rediscovered holotype of *D. goldschmidtianum* and concluded that it is identical with *D. miyakei* Schltr. The latter specific epithet is further discussed in Yukawa and Ohba (1995).

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Summary

Dendrobium ×usitae, a natural hybrid between Dendrobium bullenianum Rchb. f. and Dendrobium goldschmidtianum Kraenzl. is newly described from the Calayan Islands, the Philippines.

摘 要

フィリピンに自生する,ラン科セッコク属の 1 新分類群 $\emph{Dendrobium} \times \emph{usitae}$ Yukawa を記載する。

1994年 4月,フィリピン,ルソン島北部のカラヤン諸島,バブヤン島海抜500-700mで Villamor T. Usita 氏が発見した植物の同定を依頼された。 $Dendrobium\ bullenianum\ Rchb.\ f.\ と Dendrobium\ goldschmi-dtianum\ Kraenzl.\ にきわめて類似した形質を持つものの,花色が赤紫をおびたオレンジ色で濃赤紫色の条が入ること,唇弁基部の隆起がやや鋭形であること,小し体が鈍頭の三角形であることで,両種から明確に区別される。表 <math>1$ に示されるように,これらの形質は 1 花序あたりの花数,花の大きさといった量的形質とともに,両種の中間を示す。さらにこの植物は, $D.\ bullenianum\ と\ D.\ goldschmidtianum\ がそれぞれ約40,60%混生する場所に,少数の個体が自生する。一方,<math>D.\ bullenianum\ と\ D.\ goldschmidtianum\ の多数の個体を観察した結果,上記の諸形質は安定しており,この植物がいずれかの種の種内変異とは考えられない。これらの点からこの植物を,<math>D.\ bullenianum\ と\ D.\ goldschmidtianum\ の自然交雑種と判断し,<math>D.\ Dendrobium\ D.\ Dendrobium\ D.\$

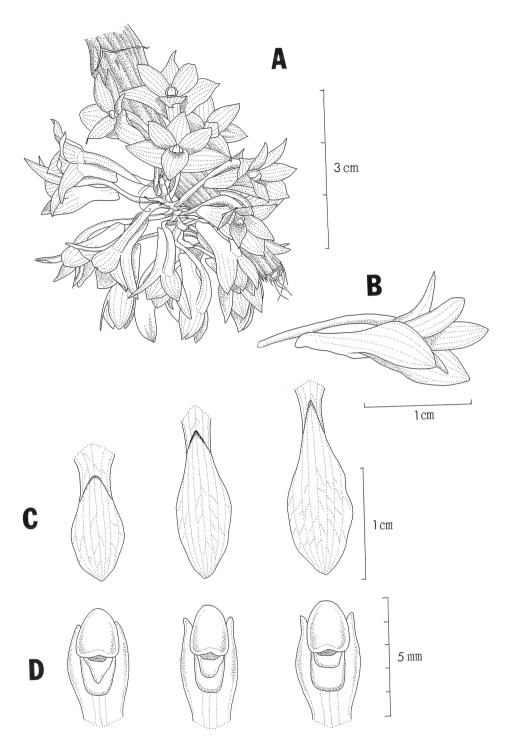


Fig. 1. Dendrobium ×usitae Yukawa. A. Inflorescence; B. Flower, side view; C. Comparison of labellums: D. bullenianum (left), D. ×usitae (centre), and D. goldschmidtianum (right); D. Comparison of columns: D. bullenianum (left), D. ×usitae (centre), and D. goldschmidtianum (right). Drawn from the type material for D. ×usitae.

×usitae と命名する。

なお親分類群のひとつ, *Dendrobium bullenianum* は, 異名の *Dendrobium topaziacum* Ames で栽培されることが多い。他方, *Dendrobium goldschmidtianum* は, 従来 *Dendrobium miyakei* Schltr. とされてきたものだが, Christenson (1994) によって, 前者が正名であることが明らかにされた。*D. miyakei* の分類学的問題については, Yukawa and Ohba (1995) を参照されたい。

Literature Cited

Christenson, E. A., 1994. Significant collections of Orchidaceae conserved in Herbarium Hamburgense (HBG). Brittonia 46: 344-354.

Yukawa, T. and H. Ohba, 1995. Typification of Schlechter's East Asian Orchidaceae held at the Herbarium, University of Tokyo. Lindleyana 10: 29-32.