

## *Dendrobium bifurcatum* (Orchidaceae) - A New Species from Vietnam

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遊川知久\* : *Dendrobium bifurcatum* - ベトナム産ラン科の一新種

*Dendrobium* Sw. section *Breviflores* Hook. f. is a small group to which 13 species are currently assigned. Species belonging to this section are found from India (Deccan) in the west to Borneo and Bali in the east with the centre of distribution being in mainland Southeast Asia. Section *Breviflores* is not a well-circumscribed section. Most morphological characters are similar to those of section *Dendrobium*. In fact, only the dense-flowered inflorescence and small-sized perianth lobes characterize the section. Phylogenetic analyses of macromolecular characters have indicated that this section is nested within section *Dendrobium* and does not represent a monophyletic group (Wongsawad *et al.* 2001; Yukawa 2001; Yukawa unpublished). A new species from Vietnam, belonging to section *Breviflores*, is described below.

***Dendrobium bifurcatum*** Yukawa, *sp. nov.* TYPE: Vietnam. Precise locality uncertain, *S. Khrukerd s. n.* (Holotype: TNS). Figs. 1, 2.

Affine *Dendrobio faulhaberiano* Schltr., sed floribus majoribus, forma menti dissimili, disco labelli plano, columna hirsuta, et operculo bifurcato distinguendum.

Plant to 70 cm tall. **Roots** elongate, branching, grey, to 1.1 mm in diameter. **Stems** clustered, often bearing offshoots, patent-pendulous, wiry, narrowly fusiform, slightly flexuous, weakly sulcate in age, leafy throughout, tightly covered by persistent leaf sheaths, with 8 to 27 internodes, to 66 cm long, to 9 mm in diameter. **Leaves** bearing 6 to 17 fresh ones, distichous; blade conduplicate, patent, coriaceous, lanceolate-oblongate, obliquely acuminate at the apex, dark green, often blotched purplish red, 5.2-11.5 cm long, 1.2-3.4 cm wide; sheaths thin, brownish green with purplish red striations, to 6.6 cm long. **Inflorescences** axillary on apical half of stems, bearing 5 to 7 flowers; peduncle inconspicuous, entirely enclosed by bracts, 4 mm long; rachis flexuous, to 3 cm long, floral bracts lanceolate, acute-acuminate, concave, to 6 mm long. **Flowers** glossy, sweetly scented, 3-3.5 cm in diameter; sepals and petals pale purplish pink, darker toward the apices; labellum cream-white, pale purplish pink at the apex; column cream-white; operculum dark purple; pollinia dark yellow; pedicellate ovary purplish pink stained with brown. **Dorsal sepal** lanceolate, acuminate, recurved, 21-24 mm long, 6-6.5 mm wide. **Lateral sepals** obliquely triangular, acuminate, recurved, 22-27 mm long, 12-13.5 mm wide at the base; mentum obtuse, making an acute angle with ovary, 5-6 mm long. **Petals** lanceolate-rhombic, acuminate, recurved, crenate toward the apex, 18-21 mm long, 5.5-6 mm wide. **Labellum** two-lobed, provided with a retrorse, transverse appendage near the base, 17-19 mm long, 11-11.5 mm wide; hypochile rotundate, dentate, adaxial surface villous, denser toward the basal appendage, abaxial surface pubescent along apical margins; epichile narrowly triangular, acute, adaxial surface villous toward the base, abaxial surface pubescent. **Column** dilated at the base, hirsute, 6 mm long;

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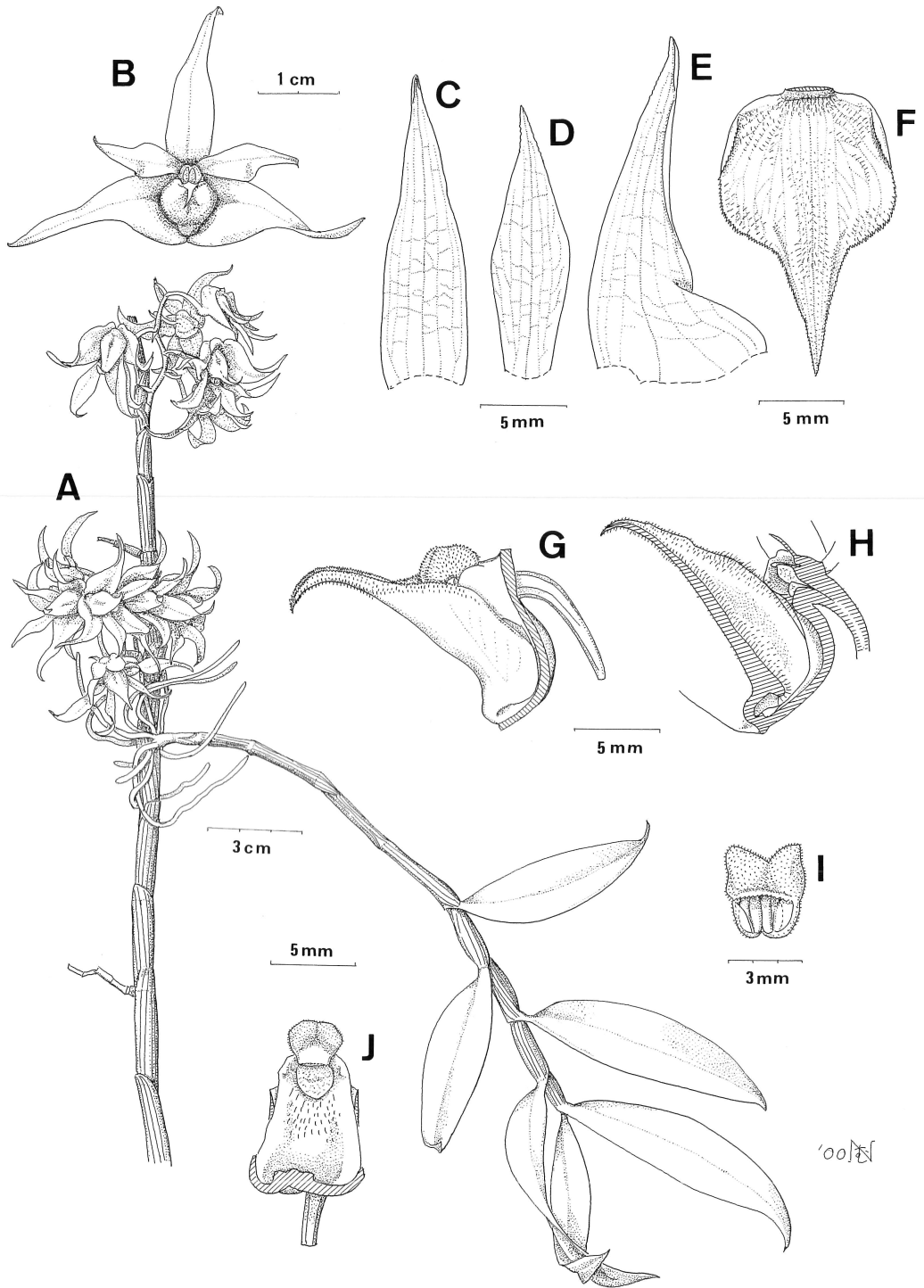


Fig. 1. *Dendrobium bifurcatum* Yukawa. A. Habit; B. Flower, front view; C. Dorsal sepal; D. Petal; E. Lateral sepal; F. Labellum; G. Labellum and column, side view; H. Labellum and column, longitudinal section; I. Operculum; J. Column and column foot, from below. Drawn from holotype (*S. Khrukerd s. n.*) by M. Nakajima.



Fig. 2. Flowering individual of *Dendrobium bifurcatum* Yukawa. Photograph from holotype (*S. Khrukerd s. n.*).

column foot strongly incurved; operculum cucullate, bifurcate, dorsally sulcate, densely papillose, 3.5 mm long, 3 mm wide; pollinia 4, in 2 pairs, 1 mm long. **Pedicellate ovary** narrowly clavate, weakly sulcate, glabrous, 14-15 mm long.

ETYMOLOGY: This species is named for its bifurcate operculum.

*Dendrobium bifurcatum* is most similar to *Dendrobium faulhaberianum* Schltr. from Hainan but can be distinguished by the following characters: 1) larger perianth lobes; 2) different shape of the mentum; 3) a flat disc of the labellum; 4) a hairy column; 5) a bifurcate operculum.

Although Seidenfaden (1985) reduced *Dendrobium oxyanthum* Gagnep. from Vietnam to a synonym of *D. faulhaberianum*, the former is distinguishable from the latter by a longer claw of the labellum, a well-developed transverse ridge of the labellum, a flat disc of the labellum, and a hairy column. *D. oxyanthum* is also comparable with *D. bifurcatum*, but the new species differs in its larger perianth lobes, different shape of the mentum, lack of a claw of the labellum, an insignificant transverse ridge of the labellum, and a bifurcate operculum.

#### Acknowledgements

I would like to thank Subhkon Khrukerd for providing the material and Mutsuko Nakajima for preparing the illustration. I also thank Kazuhiro Suzuki for skilful cultivation of the type plant. This study is partly supported by a Grant-in-Aid to Scientific Research from the Japan Society for the Promotion of Science (15405014).

### Summary

A new orchid species, *Dendrobium bifurcatum* Yukawa, is described from Vietnam. It is readily distinguished from the closely related *Dendrobium faulhaberianum* Schltr. by having 1) larger perianth lobes; 2) different shape of the mentum; 3) a flat disc of the labellum; 4) a hairy column; and 5) a bifurcate operculum.

### 摘 要

ベトナムに自生するラン科の新種、*Dendrobium bifurcatum* Yukawa を記載する。本種は *Dendrobium faulhaberianum* Schltr. に類似するが、花被片が長いこと、メンタムの形が異なること、唇弁のディスクが平坦であること、蕊柱が有毛であること、葯帽の先端が二又状であることで、よく区別できる。

### References

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