

A New Orchid, *Epipogium dentilabellum*

Shigeru OHTANI\* and Shigetaka SUZUKI\*\*

(with 1 Plate and 1 Table)

タカラトリランについて

大谷 茂・鈴木重隆

In 1958, a very rare saprophytic orchid was found by Shigeru Ohtani on a lot of decayed leaves under an ever green forest of *Shiia Sieboldii* at Takatori-yama. It was reported as *Gastrodia confusa* in Science Report of the Yokosuka City Museum No. 4, p. 19 and plate II (March 1959). Thereafter the orchid was investigated and reported again as *Epipogium japonicum* with slight doubt in the same magazine No. 5, p. 19 (March 1960).

Recently the authors made further research to ascertain the position of the orchid on the natural classification system. The following two conclusions result from this study.

Conclusion 1: It is berified that the orchid is a species of Genus *Epipogium* GMELIN, because the important characters of this orchid coincide with the generic properties of Epipogium. I.e. non-green saprophyte, stem solitary and bears remote sheath-shaped small thin leaves, inflorescence remote raceme, bract membranaceous shorter than flower, sepals and petals except labellum subequal in form, spur sacciform, etc. The authors could not find any distinct characters which should be distinguished as a different genus from Epipogium.

Conclusion 2: The orchid does not fall within the purview of every species which is already recognized in *Epipogium*. Although the orchid very much resembles *Epipogium Rolfei* SCHLECHTER and *Epipogium japonicum* MAKINO it differs from them by the items that are shown in the table below. Therefore the authors named this orchid as *Epipogium dentilabellum* S. OHTANI et S. SUZUKI and "Takatori-ran" in Japanese.

|               | <i>E. dentilabellum</i>      | <i>E. Rolfei</i>          | <i>E. japonicum</i>                      |
|---------------|------------------------------|---------------------------|--|
| Rhizome       | pyriform<br>1.5—1.7 cm. long | ellipsoid<br>3—4 cm. long | obovoid or ellipsoid<br>1.0—1.8 cm. long |
| Stem          | 21 cm. high                  | 25—55 cm. high            | 7—21 cm. high                            |
| Inflorescence | 5—7 flowers                  | 8—27 flowers              | 1—7 flowers                              |

\* Yokosuka City Museum.

\*\* Yakumo High School, Tokyo.

|                               | <i>E. dentilabellum</i>   | <i>E. Rolfei</i>                | <i>E. japonicum</i>                  |
|-------------------------------|---|---------------------------------|--------------------------------------|
| Bract                         | rhombic rotundate   | broad lanceolate                | ovate                                |
| Sepals                        | oblong 7 mm. long   | narrow lanceolate 8—10 mm. long | narrow ovate 10 mm. long             |
| Upper petals                  | ovate 6 mm. long  | oblong-lanceolate 8—10 mm. long | narrow ovate 10 mm. long             |
| <u>Labellum</u>               |   |                                 |                                      |
| Margin                        | denticulate   | entire                          | entire                               |
| Shape                         | deltoid   | broad ovate                     | deltoid                              |
| Crest-form process & papillae | 1, covered by many papillae, papillae spread irregularly both side of centre vein | 2 ,covered by many papillae     | non-process papillae make a few rows |
| Spur                          | about 1/2 long as labellum  | about 1/2 long as labellum      | as long as labellum                  |
| Ovary                         | ellipsoid   | ellipsoid                       | ovoid                                |

*Epipogium dentilabellum* S. OHTANI et S. SUZUKI Sp. nov.

Herba saprophitica, non viridis, pteridifoliacei-humosa, umbrosa in sylva, cum racemo ca. 21 cm. alta. Rhizoma pyriforme, 1.5—1.7 cm. longum, 0.9—1.1 cm. latum, laxe hirtellum. Caulis simplex, erectus, teres, cavus, ca, 3.8 mm. latus, albidos, glaber. Folia caulina ca. 6, omnia vaginiformia, membranacea, ca. 0.9—1.2 cm. longa. Racemus terminalis, simplex, erectus, rachide ca. 5 cm. longa, glabra. Bracteae cymbiformes, rhombi-rotundatae, ca. 5 mm. longae, ca. 4 mm. latae, membranaceae, trinervatae, basi ca. 1.5 mm. lata, subamplecta. Pedicelli erecto-patentes, leviter curvati, ca. 3 mm. longi, albidi. Flores cum ovariis 1.5 cm. longi, campanulati-tubulosi, ovario triangulari-ellipsoideo. Perianthii segmenta albia, subaequalia. Sepala erecto-patentia, oblonga, ca, 7 mm. longa, ca. 2 mm lata, acuta, trinervata. Petala dorsalia erecto-patentia, ovata, ca. 6 mm. longa, ca. 3 mm. lata, acuta, trinervata. Labellum deltoideum, ca. 9 mm. longum, ca. 8 mm. latum, apice rotundato, denticulatum, album et laevigatum sed parte medi pallidirosea et dense pustulata, appendicula cristata, dense pustulata, Calcar saccatum, ca, 4 mm. longum, ca. 2 mm. latum. Gynostemium curvatum, cylindricum, 3 mm. longum, apice 1.5 mm. lati, autheriferi. Semina furfuracea, debilia cum ca. 30—50 cellulis, compressi-ellipsoidea vel compressi-ovoidea, 0.23—0.30 mm. longa, 0.12—0.16 mm. lata.

Nom. Jap.: Takatori-ran (Nov.)

Typus: Japonia, Honshū Praefect.-Kanagawa, Takatori-yama in urbe Yokosuka. (Jul. 13, 1958. leg. S. Ohtani, in Herb. Mus. Urb. Yokosuka)

#### References

- HOLTTUM, R. E.. 1957, Flora of Malaya, Orchid of Malaya: 107.  
MAKINO, T., 1904. Bot. Mag. Tok. 18: 131.

- MAKINO, T. and NEMOTO, K. 1931. Flora of Japan ed. II: 1640.  
MAKINO, T., 1936. Shokubutsu-syūsetsu 2: 272—273.  
OHTANI, S. 1959. Some notes on Sparmatophyte of Miura Peninsula, Japan (3), Science Report of the Yokosuka City Museum (4); 19—20.  
OHTANI, S., 1960. Miscellaneous Notes on Plants in Miura Peninsula (1), l. c. (5): 19.  
OHWI, J. 1956. Flora of Japan: 362—363.

## 摘要

本種は、さきに本報告書4号(1959)において、多少の疑問をもったままアキザキヤツシロランとして発表したものである。ところが前川文夫博士より、タシロランではないかといわれたので、改めて検討した結果は、まさしくヤツシロランではなかった。ところがタシロランよりも、むしろアオキランに近いもののように見え、どうも南方系のタシロランでもないし、また北方系のアオキランとも異なる点があるので、これは別新種であろうと本報告書5号(1960)で報告したものである。その後、本種の分類学上の位置をたしかめる目的で徹底した形態学的解剖を試みた。その結果は、花部はタシロランに近く、その他の部分はアオキランに近いことが明らかとなった。しかし唇弁に明らかに細歯牙があることと、唇弁の中央先端付近に鶴冠状の隆起1個(4号報告で2個としたのは全くの誤りであった)あることはタシロランともアオキランとも区別することのできる本種の特徴である。そこで著者らは新種のランとし、*Epipogium dentilabellum*と命名し、和名をタカトリランと新称した。

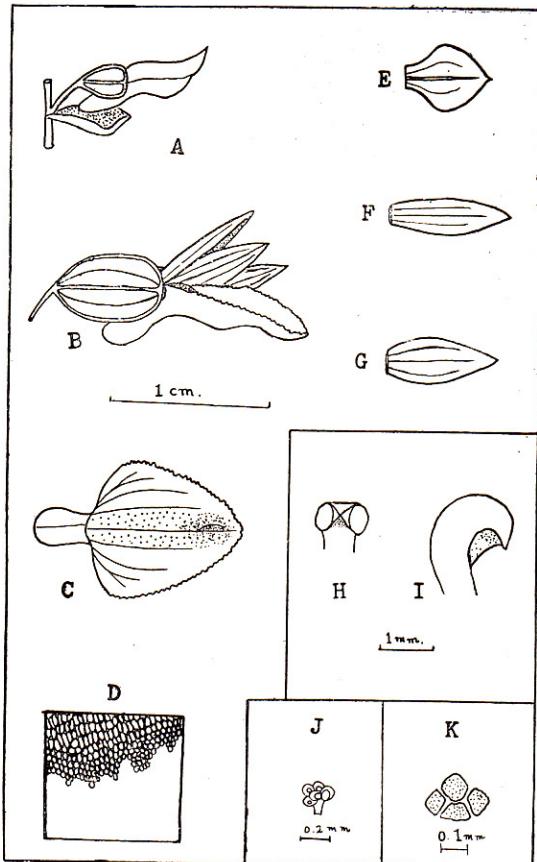


Fig. 1

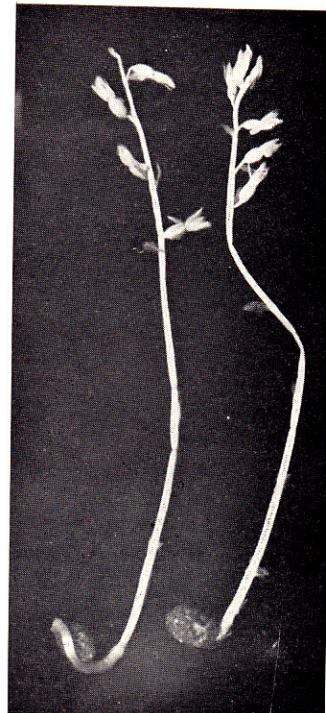


Fig. 2

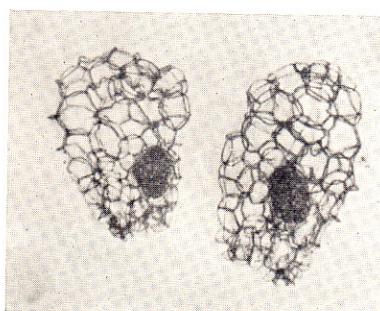


Fig. 3

*Epipogium dentilabellum* S. OHTANI et S. SUZUKI

Fig. 1. pars of flower

A. a flower bud, pollens ripe and scattered at this stage.      B. a flower, seeds ripe and scattered at this stage.      C. a labellum.      D. a part of margin of labellum, enlarged view.  
 E. a bract.      F. a sepal.      G. a petal.      H. a front view of an apex of column.      I. a lateral view of an apex of column.      J. a papilla.      K. a pollen tetrad.

Fig. 2. whole form.

Fig. 3. seeds.