A New Form of *Gastrodia javanica* (Orchidaceae)
from the Ryukyus

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**Abstract.** Some unusual plants of *Gastrodia javanica*, which have not yet been reported, occur in a forest on Ishigaki Island. I here describe them as a new form of the species. The new form is distinguishable from the typical form only by its jade green flowers and scapes.

Key words: *Gastrodia javanica*, new taxon, Orchidaceae, Ryukyu Islands, taxonomy

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*Gastrodia javanica* (Blume) Lindley is a saprophytic orchid that ranges from southwestern Japan (the Ryukyus), Taiwan and the Philippines through peninsular Thailand and Malaysia to Java (Garay and Sweet, 1974; Seidenfaden, 1978). It occurs on Ishigaki, Iriomote and Yonaguni islands (Hatusima, 1975) of the Yaeyama Group in the southern Ryukyus. This is the northernmost occurrence for the species. It is rather common in the lowland evergreen forests of Ishigaki and Iriomote Islands.

The flowers of the typical form (Fig. 2A) are brownish yellow to sulphur yellow with purplish suffusion outside (Blume, 1858; Smith, 1905; Holttum, 1964; Garay and Sweet, 1974; Valmayor, 1984; Lin, 1987; Seidenfaden and Wood, 1992). Some unusual plants with jade-green flowers and scapes, which have not yet been reported, occur in a forest on Ishigaki Island. I here describe them as a new form of the species. The new form is distinguishable from the typical form only by its coloration (Figs. 1 and 2B).

*Gastrodia javanica* (Blume) Lindley forma *thalassina* Yokota, *forma nov.* (Figs. 1 and 2B)

Differt a typo floribus et scapis thalassina, cetero ut in typo.

**Holotype.** Japan, Okinawa Prefecture, Ishigaki Island, Mt. Banna, *M. Yokota 10334* (RYU). Growing on floor of a mixed forest of *Castanopsis sieboldii* and *Quercus miyagii.*

**Japanese name.** *Hisui-yagara*, nov., named by Ms. Mutsuko Nakajima in reference to the jade green flowers.

The new form grows sympatrically with the typical form in a restricted area at the type locality. Because the only locality for the new form was
deforested in 1996, it may become extinct there.

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Fig. 2. Photographs of two forms of *Gastrodia javanica* (Blume) Lindley from the Ryukyus. A. *G. javanica* forma *javonica* along the Urauchi River, Iriomote Island, 14 Jun 1987. B. *G. javanica* forma *thalassina* Yokota, forma nov., at the type locality on Ishigaki Island, 20 Jun 20.

References


横田昌嗣：琉球産コンジキヤガラ（ラン科）の新品種
ラン科のコンジキヤガラは南琉球を北限として東南アジアに分布し、その名の通り花は黄金色である。藍緑色を強く帯びた花をつける個体が石垣島から新たに見つかったので、新品種ヒスイヤガラ Gastrodia javanica (Blume) Lindley forma thalassina Yokota として記載した。唯一の自生地は森林伐採により破壊されたため、現状では絶滅したものと思われる。
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