

A New *Neottia* (Orchidaceae) Species from Kyushu, Japan

By

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橋本 保*・初島住彦** : サカネラン属の新種

Neottia kiusiana Hashimoto & Hatusima, sp. nov.

Neottia nidus-avi affinis, a qua imprimis differt planta florifera brevior; lobis labelli transverse rectangularibus, brevioribus; lobis stigmatici erecti vel suberecti, obtuse triangularibus.

Plant saprophytic, glossy light-brown, 10 to 12 cm high from the ground. Roots fascicled, retrose and upwards, slenderly fusiform, about 2 cm long, 2 mm or more thick. Stem erect, with about 5 loose sheaths. Sheaths membranaceous; upper 3 sheaths large, foliaceous, spatulate, subacute. Inflorescence terminal, with more than 20 flowers, 6 to 7 cm long; rachis scatterly dispersed glandular hairs. Floral bracts linear-lanceolate, subacute, 1-nerved, gradually diminishing in upper ones of which shorter than the flowers or as long as the ovaries; lowermost 2 large, surpassing the flowers, similar to the upper sheaths, lanceolate or oblanceolate, obtuse, 3- to 4-major-nerved, about 20 mm long, 5 to 7 mm wide, basally connate in the type specimen; lower 3rd and 4th ones as long as the flowers, linear-lanceolate, subacute, 1-nerved, 10 to 12 mm long, basally connate in the type specimen. Pedicels and ovaries suberect in flowering; pedicel glabrous, 2 to 3 mm long; ovary with glandular hairs, as long as or longer than the pedicel except for the lowermost. Tepals suberect. Dorsal sepal cucullate, oblong, obtuse, 1-nerved, 4 mm long, about 2.2 mm wide when spread out. Lateral sepals cucullate, obliquely oblong-obovate, obtuse, 1-nerved, about 3.7 mm long, 2.1 mm wide when spread out. Petals obliquely obovate, obtuse, 1-nerved, 4 mm long, about 2.3 mm wide. Lip somewhat pellucid, anteriorly 2-lobed and notched, 5.2 mm long, 7.5 mm wide when spread out; lamina (hypochil) inversely trapeziform, shallowly concave at the base; lobes transversely oblique-rectangular with an uneven, subtruncate, anterior margin. Column about 2 mm high; stigma-lobes nearly erect in flowering, obtusely triangular, forming an inversely trapeziform portion with a central sinus; rostellum erect in flowering, oblong, obtuse. Anther decumbent in flowering, with a short filament.

ETYMOLOGY. Named for the district name KIUSIU (KYUSHU) where this species was discovered.

JAPANESE NAME. ツクシサカネラン (新称)

JAPAN. Kyushu: Kagoshima Pref.; south from the Tsuruda Dam, Tsuruda-chō, Satsuma-gun, collected on 13, May, 1991, Yutaka Ōhira-holotype in TNS (9507134). Ibid. TNS (9507135).

This new saprophytic orchid, one of the smallest member of the genus and an inhabitant of the evergreen broad-leaved forest, is similar to *N. nidus-avis* (L.) L. C. Rich. of Eurasian cool-temperate region including Hokkaido, but differs from it by its hairy rhachis and ovaries, shorter

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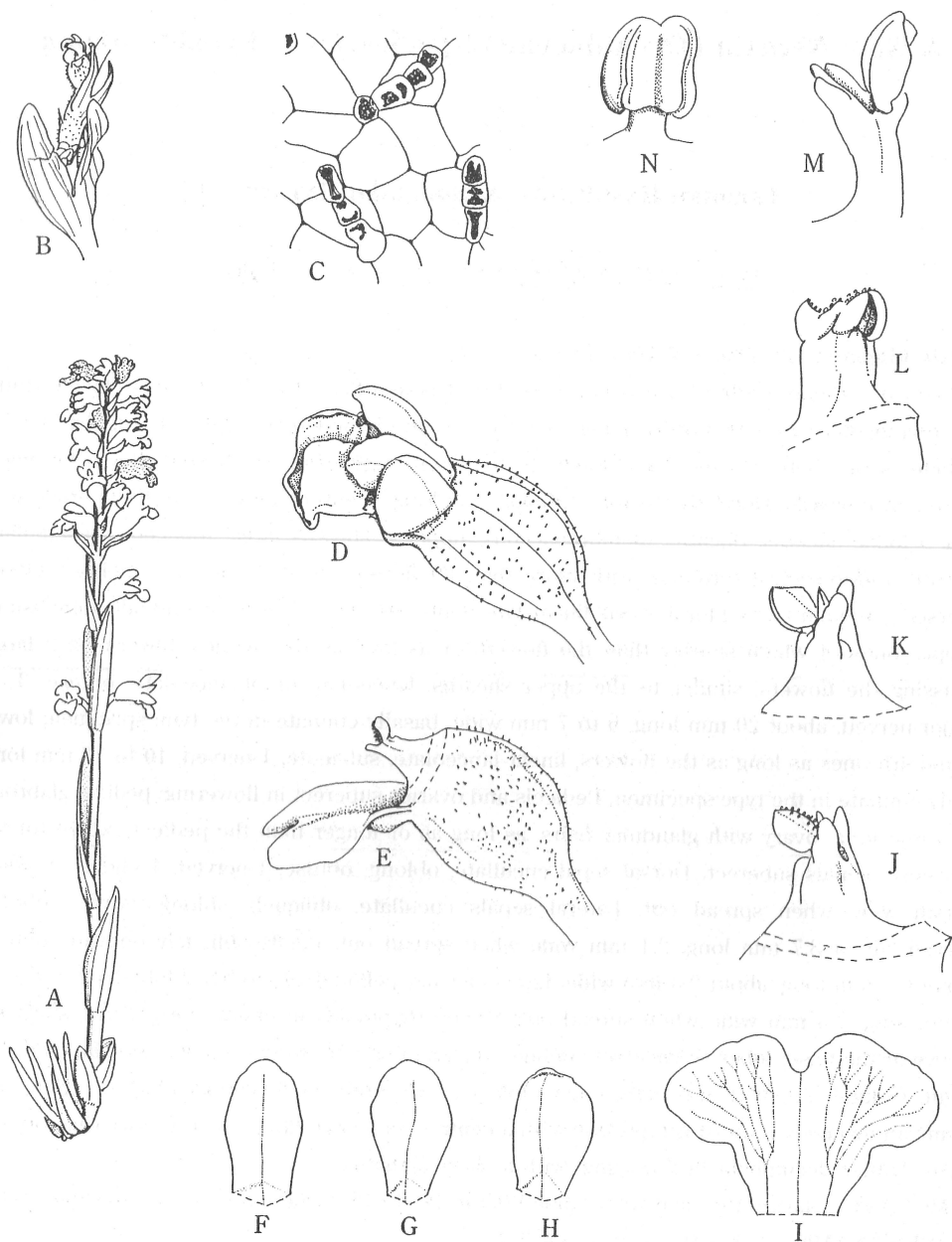


Fig. 1. *Neottia kiusiana* Hashimoto & Hatusima, sp. nov., drawn from boiled holotype specimen. A, whole plant. B, lowermost part of inflorescence, showing connate bracts. C, surface of ovary, showing granular hairs, somewhat pressed down. D, lateral view of flower. E, lateral view of flower, sepals and petals excluded. F, dorsal sepal, spread out. G, petal. H, lateral sepal, spread out. I, lip, spread out. J-L, column in flower-bud, lateral view. N, pollinia with filament in flower-bud, ventral view. A, $\times 3/4$. B, $\times 9/10$. C, $\times 1/24$. D-I, $\times 5$. J-L, $\times 10$. M & N, $\times 20$.

lobes (cf. Chen 1979, Fig. 1-19 & Rasmussen 1982, Fig. 11) of the lip and obtusely triangular stigma-lobes and by having a short but apparent filament in early flowering. From *N. brevibras* Tang & Wang from Szechuan, China, of which having tall stature and smaller-sized flowers, it also distinguishable by the shape of stigma-lobes. A Japanese cool-temperate relative, *N. papilligera* Schltr. = *N. nidus-avis* var. *manshurica* Komarov, is taller stature with a densely pubescent stem and pedicellate ovaries, subquadrate stigma-lobes (cf. Kimura 1940, Tab. 88) and narrowly rectangular lobes of the lip of which having larger flowers with shorter floral bracts than the new species. It should be noted that the columnar features of this group for the generic taxonomy by Chen (1979) shall be revised, because the new species as well as *N. asiatica* Ohwi (cf. Maekawa 1971, Fig. 47-B, C) can be distinguished from all the members of this genus by the presence of a filament, and this feature has been applied to one of the important evidence of the genus *Archineottia* Chen.

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摘 要

鹿児島県の標高 100m にも達しない鶴田ダムの方 (南側) で大平 豊氏が採集されたランである。*Neottia* (サカネラン属) の新種と認め、ここに発表する。

本種の薬柱の形を観察すると、花期には鈍三角形の柱頭裂片二つ (2 片をあわせると、中央に凹みのある逆梯形に見える) と楕円形の小嘴体が共に直立し、葯はやや後方に反り、葯の下には短い明瞭な花糸が、とくに発達初期の花で認められる。これらの形質のうち、花糸の存在は Chen (1979) によれば *Archineottia* 属 (日本からも *A. japonica* Furuse が発表されている) の重要な一形質であるというが、*Neottia* 属には柱頭裂片や小嘴体が発達しないという。しかし本種以外の例では、前川 (1971) が *N. asiatica* Ohwi (ヒメムヨウラン) に小嘴体と花糸が共にあることを図示している。これらの事実から考察し、その他の形態が各種類間で類似していることを勘案すると、Chen 説による属の概念は再検討する必要があると思われる。

属の基準種であり、かつまた類縁が近いと思われる *N. nidus-avis* (L.) L. C. Rich. (エゾサカネラン、冷温帯性) と比べると、本種は丈が低く、花軸と子房に腺毛があり、唇弁の先の裂片がさらに短い。*N. nidus-avis* の柱頭裂片は極めて短く、葯は薬柱の上に直接乗っている (Rasmussen 1982)。中国・四川から発表された *N. brevibras* Tang & Wang は発表された記載や図からみると最もよく似た種類のように思えるが、*N. brevibras* は丈が 40 cm ほどにもなり、花はより小さく (Tang & Wang 1951)、柱頭裂片はほぼ円形という (Chen 1979)。日本の代表種である *N. papilligera* Schltr. (*N. nidus-avis* var. *manshurica* Komarov サカネラン、冷温帯性) も丈は一般に高い。茎と花柄子房には密な腺毛があり、唇弁の先の裂片は細長くて両側に開いているし、柱頭裂片の発達も少ないので明かな別種である。

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