

**Studia Orchidacearum Japonicarum I**  
**Orchidaceae Formosanae Novae Atque Criticae**

auctore

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With 1 Text-Figure

1) **Platanthera transnokoensis** OHWI et FUKUYAMA, sp. nov.

Terrestris, erecta, glaberrima, 20–30 cm. alta, caule tereti medio laxe 3-foliato, basi infra folia 5–8 cm. longo vaginis 2–3 vestito, supra folia squamis c. 2. foliaceis lanceolatis sensim in bracteas decrescentibus.

Folia 2–3, erecto-patentia, elliptica vel oblongo-elliptica, 7–12 cm. longa, 2–4 cm. lata, apice obtusa vel obtuso-acuta, basi decurrentia et amplectentia, membranacea, utrinque glabra, sursum decrescentia.

Racemus subdense multiflorus, erectus, ca. 5 cm. longus, bracteis lanceolatis acutis glabris erecto-patentibus, inferioribus flores superantibus, superioribus sensim brevioribus.

Flores glabri, erecto-patentes, albescentes, pedicellis erectis 7 mm. longis glabris. Sepalum intermedium late ovatum, apice rotundato-obtusum concavulumque, basi contractum, 4.5 mm. longum, 3 mm. latum, trinervatum. Sepala lateralia deflexa, subfalcato-ovata, intermedio leviter angustiora et longiora, 5.5 mm. longa, 2.5 mm. lata, apice obtusa, trinervata. Petala oblique ovata, apice obtusa, 4 mm. longa, 2.25 mm. lata.

Labellum subrectum, declinatum, lineare, 6.5 mm. longum, 1.25 mm. latum, apice obtusiusculum, basi plerumque utrinque brevissime lobulatum vel cornutum, lobulis triangulatis acutis 1 mm. longis; calcar pedicello aequilongum, erectum, gracile, cylindraceum, apice obtusum, 6.5 mm. longum, 1.25 mm. diametens. Antherae parallelae, erectae, clavatae, apice rotundatae, basi acuminatae, inter se approximatae, 2 mm. longae; rostellum inconspicuum.

Nom. Jap. Kiraishu-yukichidori (nov.)

Hab. Formosa; prov. Taichu, in monte Kiraishu-nampoo, (J. OHWI! June, 1933. no. 3971. Typus in Herb. Orch. Fuk.)

2) **Habenaria Hosokawae** FUKUYAMA, sp. nov.

Terrestris, erecta, 35–40 cm. alta, glaberrima; partes inferiores aphyllae, laxe 3–4-vaginatae, vaginis a basi usque ad medium tubiformibus

cum tubo 3 cm. longis apice acutis vel obtusis; intermediae foliis 5-6 congestae; superiores aphyllae, floriferae, partibus aphyllis supra folia congesta 16 cm. longis et 3-4-squamatis, squamis lanceolatis a se 4 cm. remotis caulem amplectantibus.

Folia ad medium caulis approximativim sita, alterna, oblonga vel oblongo-oblancoolata, 5-8 cm. longa, infra medium 2 cm. lata, apice acuta, basi attenuata vaginataque.

Racemus ca. 5 cm. longus, glaber, laxe vel remote 6-floratus, bracteis glabris ovato-lanceolatis acuminatis trinervatis membranaceis 1.5 cm. longis ovarium brevioribus.

Flores nutantes, viridescens-albi, pedicellis inferiore recurvatis 3 cm. longis glabris. Sepala membranacea, subhyalina, glabra, subpatentia; sepalum intermedium valde gleiforme concavum, lanceolato-oblongum, ad apicem sensim attenuatum, trinervatum, 1.3 cm. longum, 3.5-4 mm. latum; sepala lateralia intermedio aequi-longa sed latiora, basi obliqua, trinervata, ovato-lanceolata, apice acuta. Petala fere ad basin profunde usque bifida vel bipartita, partibus linearibus inter se divergentibus crassiusculis; antica recta vel subfalcatis recurva, e basi 1.5 mm. lata, sursum sensim filiforme-attenuata, 1.4 cm. longa, binervata; postica quam antica longiora, ca. 1.7 cm. lata, ad apicem margine dense puberula, ad basin glanduloso-ciliata.

Labellum tripartitum, partibus linearibus; intermedia 1.2 cm. longa, 2 mm. lata, apice acuta; laterales intermedia longiores, 1.7 cm. longae, 1.5 mm. latae a intermedio angulo 45° divaricatae, ad apicem margine dense puberulae, ad basin pruriens, basi calcaratae. Calcar ovario brevior, 1.4 cm. longum, antice recurvum, ad apicem dilatatum, apice brevissime bipartitum. Columna 8 mm. longa; stigma 2-partita.

Nom. Jap. Hagoromo-sagiso (nov.)

Hab. Formosa; prov. Taitoo, in monte Tippon-zan, inter Han-no-ki et Budai, ad circ. 4000 ped. alt., (T. Hosokawa! Aug. 23, 1932. no. 3975. Typus in Herb. Orch. Fuk.)

No doubt, present species is closely related to Formosan *Habenaria longitentaculata* HAYATA, but is separable from it in having lips with hairs and by its shortly bilobate spurs swelling toward the apex.

### 3) *Epipactis Ohwii* FUKUYAMA, sp. nov.

Terrestris, erecta, 40-50 cm. alta, stricta, gracilis, basi glabra, apicem versus papilosa, inferne aphylla et 1-2-vaginata, superne laxe 3-4-foliata, radicibus pluribus eramosis flexuosis filiformibus glabris.

Folia patentia, glabra, scaberrimecula, amplexicaulia, elliptica vel oblongo-elliptica, 4-6 cm. longa, medio fere 1.5-2 cm. lata, apice obtusa vel obtuso-acuta, basi contracta et vaginata.

Racemus papillosus vel scaber, erectus, ca. 7 cm. longus, sublaxe 10-floratus, bracteis foliaceis deflexis glabris lineari-oblongis vel lanceolatis acuminatis inferioribus flores longioribus 2.5–3.5 cm. longis superioribus sensim brevioribus et angustioribus.

Flores subnutantes, subpatentes, virides, pedicellis viridibus 1.1 cm. longis. Sepala viridia, aequilonga et subaequiformia, dorso medio costis angulato-prominente, sepalo intermedio ovato 8 mm. longo 3.5 mm. lato apice subacuto basi haud contracto, lateralibus intermedio subaequiformibus sed obliquis lateribus superioribus truncatis 8 mm. longis 3.5 mm. latis apice triangulare acutis basi contractis. Petala viridia, sepalo leviter tenuiora, glabra, obliqua, ovato-oblonga, dorso medio costis prominente, ad apicem attenuata et cuspidato-obtusa, basi contracta.

Labellum sepalis brevius, 6 mm. longum, viride, glabrum, medio plus minusve constrictum, hypochilio saccato-semiglobo-basi incrassato 3 mm. longo, epichilio subcordato breviter acuminato 3 mm. longo medio 2.5 mm. lato supra basin discis duobus obtusis elevatis instructo. Columna glabra, brevis, 3 mm. longa, exalata; stigma prominens. Anthera bilocularis, ovata, 3 mm. longa.

Nom. Jap. Taizan-aosuzuran (nov.)

Hab. Formosa; prov. Taihoku, in pratis monte Nanko-taizan, ad 8000 ped. alt., inter Bunakkei et Piyanan-anbu, (N. FUKUYAMA! Jul. 21, 1933. no. 3973. Typus in Herb. Orch. Fuk.)

This plant is very striking species having green flowers with saccate and semi-globose hypochils. I have a great pleasure in naming this orchid after my esteemed friend Mr. J. OHWI, a well known great caricologist and ardent scholar of the Flora of Japan.

#### 4) *Gastrodia taiwaniana* FUKUYAMA, sp. nov.

Terrestris, aphylla, erecta, 30–60 cm. alta, rhizomate tuberoso cylindraceo subhorizontale pubescenti squamatoque 3.5–10 cm. longo 8 mm. diametiente. Caulis e apice rhizomatis assurgens, erectus, gracilis, teres, glaber, fulvo-rubescens, 2–4 mm. diametens, basi vaginatus, medio fere 4–5 remote squamatus, squamis 5 mm. longis lobatis.

Flores 10–20 in apice caulis subdense racemosi; pars florifera usque ad 2–6 cm. longa, erecta, bracteis parvis oblongis glabris apice acutis basi non contractis 3 mm. longis 1 mm. latis trinervatis. Pedicellis glabris, ovario excepto 7 mm. longis, 1 mm. latis, ovario glabro obconico-pyramidalis 2 mm. longo. Sepala inter se connata, campanulata vel tubum formantia sed apicibus libera, tubo cum lobis circ. 1 cm. longo antice 7 mm. in diametro intus et extus laevi; lobi tres exteriores (sepala), subaequales, lato-triangulares, obtusi, 3 mm. longi, 4 mm. lati, posterior quam laterale paullo