

## Studia Orchidacearum Japonicarum IV\*

### Orchidaceae Formosanae Novae Atque Criticae

auctore

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Received January 8, 1935

#### 32) *Orchis taiwanensis* FUKUYAMA, sp. nov.

Terrestris, gracilis, erecta vel stricta, glaberrima, 7-18 cm. alta, tuberculis pilosiusculis globosis vel ovoideis ellipsoideisve. Caulis plerumque remote bifolius interdum trifolius, basi 1-2-vaginatus, vaginis membranaceis apice acutis obtusisve caulem arcte amplectentibus.

Folia erecto-patentia, linearia vel lanceolato-linearia lanceolatae, in exsiccato chartacea, apice acuta vel acuminata, basi foliis superioribus abrupte contracta vel gradatim attenuata et caulibus articulata, basi foliis inferioribus in vaginam decurrentia et amplectentia, c. 3.5-9 cm. longa, medio 4-15 mm. lata, utrinque glabra, trinervata.

Racemus terminalis, suberectus, secundus, 2-5 cm. longus, laxiuscule 3-11-floratus, bracteis lanceolatis apice acuminatis basi contractis utrinque glabris c. 1-1.5 cm. longis superioribus sensim brevioribus.

Flores rosei, apertientes, pedicellis rectis glabris bracteis subaequilongis raro duplo longioribus. Sepalum intermedium ellipticum, apice obtusiusculum, ad basin angustatum, concavum, dorso medio costa prominens, membranaceum, c. 5 mm. longum, medio 2.5 mm. latum, utrinque glabrum, uninervatum. Sepala lateralia posteriore valde reflexa, oblique oblonga vel ovato-oblonga, latere superiore lente truncata, apice obtusiuscula, basi paullo contracta, margine superiore leviter revoluta, dorso medio costis prominentia, c. 5-6 mm. longa, infra medium 3-3.5 mm. lata, utrinque glabra, uninervata. Petala cum sepalo intermedio in galeam conniventia, oblique oblonga, apice obtusa, basi contracta, margine lente irregulariter undulata, membranacea, sepalis paullo minora, medio c. 2.5 mm. lata, utrinque glabra, uninervata.

Labellum sessile, erecto-patens, circuitu semi-orbiculatum vel ovato-orbiculatum, c. 1 cm. longum, inter apices loborum lateralium c. 1.1 cm. latum, supra minutissime pilosiusculum, basi truncatum vel obtusum, medio leviter vel manifeste trilobatum, lobis lateralibus oblique oblongis vel

\* Continued from Bot. Mag. (Tokyo). 48 (1935), p. 442.

Flores subapertientes, glabri, pedicellis 1-2 cm. longis glabris. Sepala linearia, apice acuta, basi non contracta, c. 1 cm. longa, 1.5 mm. lata, membranacea, utrinque glabra, trinervata, sepalis lateralibus intermedio similibus sed paullo falcatis. Petala sepalis paullo breviora et latiora, c. 1.1 cm. longa, medio 2 mm. lata, membranacea, utrinque glabra, trinervata.

Labellum rectiusculum, explanato orbiculato-obovato-cuneatum, c. 8 mm. longum, superiore trilobatum, inter apices loborum lateralium explanatorum c. 6 mm. latum, inferiore unguiculatum et cum pede columnae articulatam, utrinque glaberrimum, lobo intermedio latissimo c. 2.5 mm. longo 5 mm. lato apice truncato ad centrum obsolete acuto, lobis lateralibus minoribus auriculatis acutiusculis, lamellis 3 parallelis aequalibus e basi usque infra apicem decurrentibus. Columna erecta, semiteres, c. 5 mm. longa, basi ad pedem brevem producta.

Nom. Jap. Ruridama-aoiran (nov.)

Hab. Formosa; praef. Taihoku, Piyanan-anbu, (N. FUKUYAMA! no. 4148. Typus in Herb. Orch. Fuk.)

38) **Oberonia gigantea** FUKUYAMA, sp. nov.

Epiphytica, pendula, acaulis, c. 20 mm. longa, radicibus gracilibus filiformibus flexuosis glabris. Folia 7-8, approximativim et alternativim disticha, equitantia, crassiuscula, flabelliforme erecto-patentia, laminis ensiformibus apice acuminatis ad basin gradatim dilatatis basilaribus brevioribus c. 5-8 cm. longis medio c. 8 mm. latis apicalibus longioribus 15-20 cm. longis medio c. 1.5 cm. latis utrinque concoloribus glabrisque.

Racemus breviter pedunculatus, pendulus, gracilis, dense multi-floratus, pedunculo c. 5 cm. longo multi-squamato, racemo ipso usque ad 15 cm. longo per anthesin c. 8 mm. diametiente, bracteis squamis conformibus triangulato-linearibus apice acuminatis basi paullo dilatatis margine vix denticulatis c. 2.5 mm. longis glabris.

Flores subverticillato-congesti, apertientes, 2-3 mm. diametientes, fusciscentes, pedicellis cum ovarii erecto-patentibus bracteis subaequi longis. Sepala patentia, aequilonga, c. 1 mm. longa, sepalo intermedio ligulato apice obtuso basi non contracto 0.5 mm. lato, sepalis lateralibus late ovatis apice acutis basi vix contractis medio c. 1 mm. latis. Petala elliptica vel ovata, apice obtusa, sepalo aequilonga, c. 0.5 mm. lata.

Labellum erecto-patens, c. 1.5 mm. longum, totiusque latum, infra medium trilobatum, lobis lateralibus auriformibus margine erosis vel irregulariter denticulatis c. 0.5 mm. longis, lobo intermedio subrectangulato c. 1 mm. longo infra apicem bilobulato, lobulis triangulatis obtusiusculis. Columna brevissima.

Nom. Jap. Tsurishaga-yoorakuran (nov.)

Hab. Formosa; praef. Haihoku, in laurisolvis monte Shooagyoku-san, (N. FUKUYAMA! Aug. 1933, no. 4543. Typus in Herb. Orch. Fuk.)

This species was collected on the leafless branch of *Ficus Harlandi* BENTH. near Agyoku in the northern part of Formosa and was brought back to the Taihoku Botanical Garden where it flowered, in Dec. 1933.

39) **Oreorchis Ohwii** FUKUYAMA, sp. nov.

Terrestris, erecta, gracillima, c. 30 cm. alta, pseudobulbis globoso-ovoideis basi rotundatis c. 1–1.5 cm. altis carnosis, radicibus elongatis filiformibus flexuosis seriseo-pilosis.

Folia in apice pseudobulbi sita, solitaria vel duo, linearia, apice acuminata, basi in petiolum angustissimum abeuntia, c. 30 cm. longa, medio c. 7 mm. lata, in exsiccato membranacea, utrinque glabra, multinervata.

Scapi e nodis superioribus pseudobulborum oriundi, simplices, stricti, teretes, glabri, quam folia paullo breviores, cum racemo c. 20–28 cm. longi, supra basin c. 2 mm. in diametro, remote 2-vaginati, vaginis 2–5 cm. longis caulem complete amplectentibus apice breve acutis glabris, racemo florifero usque ad 5 cm. longo dense multiflorato, bracteis minutis ovato-lanceolatis acuminatis c. 3 mm. longis utrinque glabris.

Flores patentes, pedicellis cum ovariis c. 8 mm. longis rectis gracillimis. Sepala aequilonga, utrinque glabra, 5-nervata, sepalo intermedio oblongo vel oblongo-lanceolato apice acuto basi attenuato c. 5 mm. longo infra medium 2 mm. lato, sepalis lateralibus oblongis leviter falcato-obliquis apice acutis basi paullo contractis media c. 2 mm. latis. Petala oblanceolata, apice acuta, ad basin sensim attenuata, sepalis aequilonga, sed angustiora, supra medium c. 1.5 mm. lata, utrinque glabra, 3–5-nervata.

Labellum glabrum, c. 4 mm. longum, basi unguiculatum, supra basin trilobatum, lobis lateralibus oblanceolatis acutis vel acutiusculis 1.5–2 mm. longis, lobo intermedio obtriangulato vel cuneato-obovato apice truncato-rotundato margine anteriore crispo c. 3 mm. longo apice 3 mm. lato e basi loborum lateralium sursum infra medium appendiculis unis lamellatis 1 mm. longis  $\frac{1}{3}$  mm. altis supra unisulcatis instructo. Columna erecta, c. 2.5 mm. longa, glabra. Pollinia 4, globosa, distincta, inappendiculata.

Nom. Jap. Yasagata-kokeiran (nov.)

Hab. Formosa; praef. Taihoku, in silvis monte Nanko-taizan, (J. OHWI! Jun. 1, 1933. no. 4547. Typus in Herb. Orch. FUK.)

40) **Calanthe dolichopoda** FUKUYAMA, sp. nov.

Terrestris, caulescens, erecta, c. 40–60 cm. alta, rhizomate valde abbreviato, radicibus teretibus filiformibus leviter flexuosis puberulis rugulosis. Caulis ad apicem foliatus, elongatus, teres, viridis, carnosus, glaber, c. 40