

## Studia Orchidacearum Japonicarum V\*

### Orchidaceae Formosanae Novae Atque Criticae

auctore

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With 1 Text-Figure

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41) ***Calanthe pumila* FUKUYAMA, sp. nov.**

Terrestris, *pumila*, c. 20 cm. alta, radicibus teretibus rigidiusculis filiformibus leviter flexuosis puberulis sicco c. 1.5–2 mm. diametentibus.

Folia 4–5, basilaria, suberecta, linearia vel oblanceolato-lineararia, apice acuminatissima, basi in petiolum angustum basi vaginantem longe decurrentia, c. 20–30 cm. longa, supra medium c. 8–13 mm. lata, in exsiccato tenuiter coriacea, utrinque glabra, subtus prominente trinervia, inter nervos venulosa.

Scapus e basi fasciculi foliorum oriundus, strictus, glaber, foliis vulgo brevior, c. 15–18 cm. longus, medio c. 2.5 mm. in diametro, remote 4–5-vaginatus, vaginis apice apiculatis ad basin tubiformibus et amplectentibus membranaceis utrinque glabris c. 1.8 cm. longis superioribus minoribus, racemo florifero c. 3 cm. longo subdense florato, bracteis caducis lanceolatis apice acuminatis basi paullo contractis membranaceis subhyalinis glabris.

Flores albescentes, subapertientes, pedicellis cum ovariis rectis c. 1.2 cm. longis glabris. Sepalum intermedium oblongum, apice acuminatum, ad basin plus minusve contractum, c. 1 cm. longum, medio c. 4 mm. latum, utrinque glabrum, membranaceum, trinervatum, sepalis lateralibus intermedio similibus sed paullo longioribus obliquisque. Petala orbiculato-obovata vel orbiculato-elliptica, apice rotundata, ad summam apiculata, ad basin angustata, c. 8 mm. longa, medio 6 mm. lata, utrinque glabra, membranacea, trinervata, nervis lateralibus extorse venulosis.

Labellum c. 6 mm. longum, calcaratum, basi breve bilamellatum, supra basin perprofunde trilobatum, lobo intermedio orbiculato apice rotundato ad summam interdum leviter retuso ad infimam ungue perbrevis perangusto instructo margine integro utrinque glabro c. 4 mm. longo totiusque lato, lobis lateralibus oblongis obliquis obtusis c. 3 mm. longis 2 mm. latis glabris, calcare cylindrico recto apice obtuso c. 6 mm. longo medio 2 mm.

\* Continued from Bot. Mag. (Tokyo), 49 (1935), 306.

43) ***Ione bifurcatoflorens*** FUKUYAMA, sp. nov.

Epiphytica, decumbens, radicibus sub pseudobulbo e rhizomate oriundis filiformibus rigidiusculis glabris rugulosis, rhizomate longe repente c. 1.5 mm. diametiente lignoso, pseudobulbis se 1-4 cm. distantibus ovoideis paullo obliquis carnosis glabris 1-1.5 cm. altis supra basin 5-8 mm. diametientibus apice unifoliatis.

Folia erecta, anguste oblonga vel linearia, apice obtusa vel acutiuscula, ad summam brevissime biloba, basi in petiolos breves tortuosos attenuata, c. 3-7 cm. longa, medio c. 7-12 mm. lata, crassa, utrinque glabra, subtus medio elevato-costata.

Scapus e basi pseudobulbi oriundus, substrictus, vulgo 3 cm. longus, superiore divaricato-bifloratus, inferiore vaginis paucis acuminatis vel apiculatis obtectus, bracteis oblongis vel ovato-oblongis apice acutis basi vix vel haud contractis 7-9 mm. longis membranaceis glabris.

Flores patentis, c. 1.5 cm. diametientes, pedicellis rectis c. 1 cm. longis glabris. Sepalum intermedium ovato-triangulatum, apice acutum, basi paullo contractum, integrum, c. 1 cm. longum, supra basin 5 mm. latum, utrinque glabrum, vivo crassiusculum, 5-nervatum, sepalis lateralibus intermedio subaequalibus sed paullo obliquis. Petala lanceolata, basi non contracta, sursum sensim angustata, apice acuminata, c. 8 mm. longa, basi 2 mm. lata, utrinque glabra, inferiore margine denticulato-ciliata, supra basin apicem versus incrassata, partibus incrassatis aurantiacis interdum murinis.

Labellum c. 6 mm. longum, cum pede perbrevis columnae adnatum, utrinque glabrum, basi biappendiculatum, inferiore orbiculatum concavumque, superiore cuspidatum incrassatumque, parte incrassata c. 3.5 mm. longa apice acuminata aurantiaca interdum murina. Columna crassa, brevissima.

Nom. Jap. Hanabi-ran (nov.)

Hab. Formosa; praef. Takao, Naihonroku-goe, in silvis prope Fujieda c. 1300 m. alt., (N. FUKUYAMA! Oct. 21, 1934. no. 4560. Typus in Herb. Orch. Fuk.)

44) ***Thelasis clausa*** FUKUYAMA, sp. nov.

Epiphytica, compacta, pumila, c. 5-10 cm. alta, radicibus filiformibus flexuosis teretibus glabris rugulosis, rhizomatibus abbreviatis, pseudobulbis approximativim connexis oblique depresso-globosis 2-5 mm. altis glabris apice 1-2-foliatis.

Folia vulgo 2, alterum valde minus vel abortivum, linearia vel anguste oblonga, erecto-patentia, apice obtusa et plerumque brevissime inaequaliter bilobata, ad basin sensim paullo angustata, c. 5-13 cm. longa, medio c. 7-10 mm. lata, in exsiccato membranacea, utrinque glabra, nervosa.

Scapus e basi pseudobulbi oriundus, strictus vel substrictus, folio

plerumque brevior, c. 4–7 cm. altus, teres, glaber, carnosulus, remote 1–2-squamatus, squamis parvis ovato-triangularis apice acutis sensim in bracteas decreescentibus.

Flores inversi, fere clausi, in apice scapi dense racemosi, parte racemosa c. 1.5–5 cm. longia, bracteis patulis vel paullo deflexis ovato-triangularis apice acutis vel acuminatis basi vix contractis c. 2.5–3 mm. longis supra basin c. 2 mm. latis carnosulis subtus medio leviter carinatis utrinque glabris, pedicellis erectis bracteis aequilongis vel vix brevioribus compressis ancipitibus deorsum sensim angustatis glabris. Sepalum intermedium ovato-oblongum vel oblongo-triangularum, apice subacutum, basi non contractum, c. 2 mm. longum, basi c. 1 mm. latum, utrinque glabrum, sepalis lateralibus intermedio majoribus c. 3 mm. longis apice obtusis carnosulis glabris navicularibus alticarinatis, carinis in margines pedicelli decurrentibus. Petala anguste oblonga, apice obtusa vel subacuta, basi non contracta, sepalis breviora et angustiora tenuioraque, c.  $1\frac{1}{3}$ – $1\frac{2}{3}$  mm. longa, medio c.  $\frac{1}{2}$  mm. lata, utrinque glabra.

Labellum ovatum vel triangulato-ovatum, indivisum, apice acutiusculum, basi paullo contractum, c. 2 mm. longum, supra basin c.  $1\frac{1}{3}$  mm. latum, utrinque glabrum, trinervatum. Columna brevissima, apoda, e basi in rostellum bifidum subulatum erectum attenuata. Anthera longe cordata, acuminata.

Nom. Jap. Kookichi-ran (nov.)

Hab. Formosa; praef. Karenkoo, Kenkai-shichoo, in silvis prope Taroko-chaya, (KOOKICHI SEGAWA! Aug. 15, 1934. no. 4562. Typus in Herb. Orch. Fuk.)

The genus is new to the flora of Japan.

45) **Phreatia taiwaniana** FUKUYAMA, sp. nov.

Epiphytica, caespitosa, pusilla, 5–10 cm. alta, radicibus filiformibus teretibus flexuosis glabris, rhizomate in arborem repente tereti vaginis obtecto vel subnudo subremote pseudobulboso, pseudobulbis complanato-globosis paullo obliquis c. 3–5 mm. altis omnibus vaginis acutis scariosis leviter superantibus obtectis apice 1–2-foliatis.

Folia linearia vel anguste oblonga, c. 1.5–4.5 cm. longa, medio 3–7 mm. lata, apice obtusa et suboblique retusa, erecta vel paullo recurva, superne planiuscula, basi canaliculata et in petiolum brevem crassum attenuata. vivo subcarnosa, utrinque glabra, ad costas supra impressa subtus elevata.

Scapus strictus vel erectus, gracillimus, teres, glaber, remote squamis paucis acuminatis ornatus, folia plerumque duplo superans, c. 5–10 cm. longus, racemo florifero subnutante 1–2 cm. longo subdense florato, bracteis ovato-lanceolatis acuminatis 2–2.5 mm. longis membranaceis utrinque