

## The Kanehira-Hatusima 1940 Collection of New Guinea Plants. XVIII.

By

R. Kanehira and S. Hatusima

Received December 7, 1942.

R. KANEHIRA & S. HATUSIMA: Gesneriaceae.

*Aeschynanthus kermesinus* SCHLTR. in ENGL. Bot. Jahrb. 58 (1923) 281, nom. et Nova Guinea 14 (1926) 309 fig. 1. Fig. 1.

Nos. 12539, 12401 KANEHIRA-HATUSIMA, Sennen, Nabire, March 7, 1940; in rain-forests at about 400 m. altitude. No. 12588 KANEHIRA-HATUSIMA, Ayerjat, Nabire, March 8, 1940; in rain-forests at about 300 m. altitude. An epiphytic liana, about 1 m. long; flowers red. The undescribed fruits are as follows: Fructus 15 cm. longus, 3 mm. latus.

*Distrib.* Endemic; the type was from Cautier Mountains, Geelvink Bay.

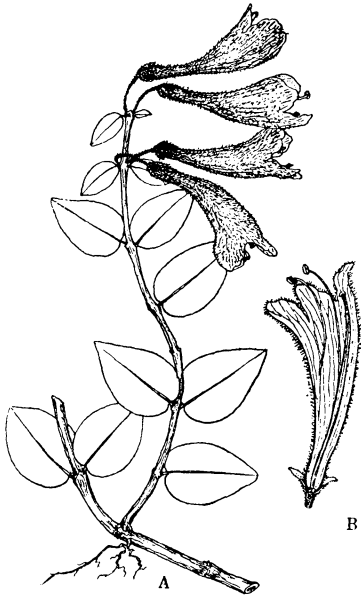


Fig. 1. *Aeschynanthus kermesinus*  
SCHLTR. (No. 12401)  
A Branchlet  $\times \frac{1}{3}$ .  
B Flower in l. s.  $\times \frac{3}{8}$ .



Fig. 2. *Aeschynanthus leptocladus*  
C. B. CLARKE  $\times \frac{4}{9}$ .  
(No. 13676)

*Aeschynanthus leptocladus* C. B. CLARKE in DC. Prodr. Contin. 5 (1883)

39; SCHLTR. in ENGL. l. c. 58 (1923) 266. Fig. 2.

*Trichosporum leptocladum* O. KUNTZE, Rev. Gen. 2 (1891) 478.

No. 13676 KANEHIRA-HATUSIMA, Angi, Arfak Mts., April 6, 1940. In rain-forests near Iray, Lake Giji at about 2000 m. altitude.

*Distrib.* Endemic; the type was from Hatam, Arfak Mts.

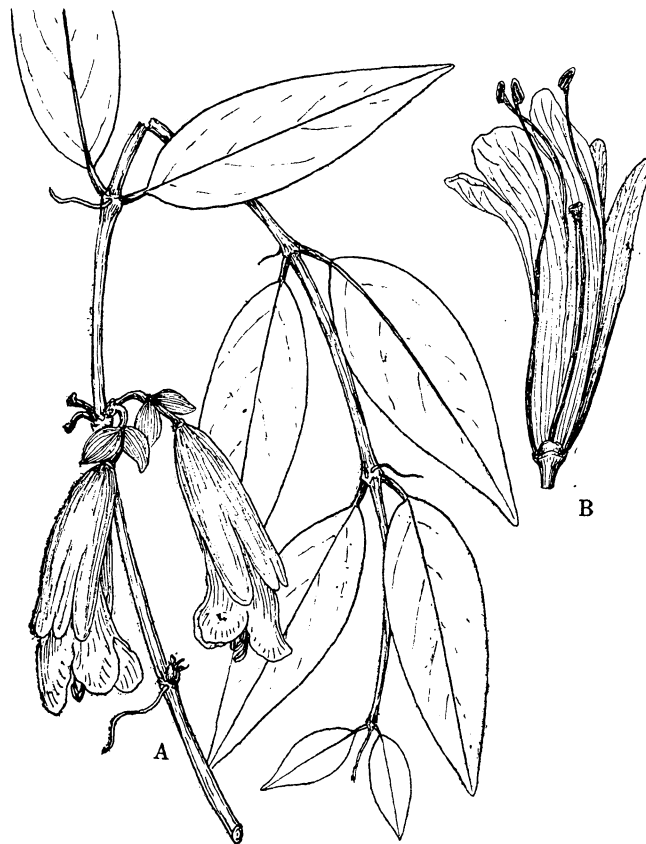


Fig. 3. *Aeschynanthus nabirensis* KAN. et HAT. (No. 12819)

A Branchlet  $\times 4/9$ . B Flower in l. s.  $\times 1/2$ .

***Aeschynanthus* (§ *Anisocalyx*) *nabirensis* KANEHIRA et HATUSIMA sp. nov.**

Fig. 3.

Frutex epiphiticus parum ramosus, rami elongati penduli teretes grisei circ. 2.5 mm. crassi glabri. Folia oblongo-elliptica, carnosula, 6–7 cm. longa 2–2.7 cm. lata, apice obtuse acuminata, basi obtuse rotundata, margine integra, in sicco supra rugulosa subtus laevia, petiolo 5–7 mm. longo 1.5 mm. crasso. Inflorescentiae axillares biflorae, pedunculo perbrevis, pedicelli 8–10 mm. longi glabri, bractee ovato-ellipticae circ. 1.3 cm. longae 8 mm.

latae glabrae margine sparse pilosae. Calyx cylindrico-tubulosus circ. 4.2 cm. longus glaber usque ad medium trilobatus, labio superiore (postico) breviter et obtuse 3-lobulato, labio 2 inferiore sublanceolato apice obtuso circ. 2 cm. longo basi 7 mm. lato margine sparsissime piloso. Corolla carnosula flava apicem versus aurantiacim transeuns, extus glabra, tubo cylindraceo 3.5 cm. longo apice 1.3 cm. lato, faucem versus sensim leviter dilatato, intus glabro, lobis ovatis apice obtusis, margine ciliatis, extus glabris, intus medio pauca pilosulis, circ. 1 cm. longis. Stamina 4, supra medium tubi inserta corollam haud excedentia, filamentis filiformibus glabris 3 cm. longis, antheris oblongis circ. 3 mm. longis, staminodium nullum. Ovarium gracile, glabrum stipitatum, cum stylus circ. 4.5 cm. longum, stigma peltato-capitatum circ. 2.5 mm. latum, puberulum.

No. 12819 KANEHIRA-HATUSIMA, Bivak Prao, Nabire, March 11, 1940. In edge of fringing rain-forests at about 100 m. altitude.

This is most closely related to *Aeschynanthus pachyanthus* SCHLTR., from which it differs by its much smaller leaves, two-flowered inflorescences, larger calices and longer filaments.

### **Didissandra**

(§ *Eudidissandra*)

#### **novo-guineensis**

KANEHIRA-HATUSIMA, sp. nov. Fig. 4.

Herba erecta, caulis simplex circ. 30 cm. altus 2-3 mm. crassus, dense pubescens. Folia opposita, oblongo-lanceolata, plerumque 10-12 cm. longa 2-2.8 cm. lata, apice obtuse acuta, basi acuta, margine undulato-denticulata, supra glabra, subtus



Fig. 4. *Didissandra novo-guineensis* KAN. et HAT. (No. 12449)

A Habit sketch  $\times 4/9$ . B Flower  $\times 1\frac{1}{3}$ .

C The same in longit. section  $\times 2$ .

nervis dense breviterque hirsuta, papyracea, nervis lateralibus utrinsecus 10 vel 11, arcuatim adscendentibus utrinque paullo elevatis, petiolo plerumque 1.5–1.8 cm. (0.6–3 cm.) longa dense puberulo. Inflorescentiae terminales, racemosae spiciformes, pluriflorae (circ. 10), circ. 8 cm. longae, rhachis gracilis subdense strigillosa. Flores breviter pedicellati, pedicelli 1–2 mm. longi strigillosi. Calyx fere usque ad basin 5-partitus, segmentis lineari-subulatis 1–1.5 cm. longis, tricostatis, subdense albido-hirsutis, bracteolis subulatis calyce similimis circ. 7–10 mm. longis. Corollae tubus cylindraceus infra medium angustatus extus glaber, circ. 1.2 cm. longus 3 mm. latus, lobis subrotundatis circ. 2 mm. longis. Stamina fertilia 4, in parte inferiore tubi inserta, filamentis filiformibus 5-ta apice glanduloso-pilosis cetera glabris circ. 5 mm. longis, antheris circ. 0.8 mm. longis. Ovarium ovoideo-cylindraceum circ. 2 mm. longum extus sparse glandulosum; discus annularis, stylus filiformis 7–8 mm. longus glaber. Fructus ignotus.

No. 12449 KANEHIRA-HATUSIMA, Patema, Nabire, March 6, 1940. In rain-forests at about 300 m. altitude.

This is most closely related to *Didissandra Clarkei* Kds. from northern Celebes, from which it differs by its larger leaves and longer calyx segments with hirsute hairs. It might be correct to reduce the species to a variety of KOORDER's, if more abundant materials from both distincts were compared. The genus is new to the flora of New Guinea.

**Dichrotrichum angiense** KANEHIRA et HATUSIMA sp. nov. Fig. 5.

Suffrutex epiphiticus, parum ramosus, in arboribus longe repens, caules et rami filiformes, flexuosi, radicanes, laxe foliati, sordide fuscescendo-villosuli, rami juniores circ. 1 mm. crassi. Folia dimorpha, obovata, 3-ta parte superiore utrinque in lobum triangulum obtusiusculum lobo terminali similem sed paullo brevior producta, ceterum obtusiuscule grosseque dentata, basi anguste cuneata, 1.8–3.5 cm. longa, 1–2 cm. lata, utrinque sparse hispidula, petiolo gracile 0.5–1.5 cm. longo villosulo. Inflorescentiae axillares umbellatim 2-vel 3-florae, pedunculo 2.5–3 cm. longo circ. 1 mm. crasso villosulo, pedicellis filiformibus 5–8 mm. longis villosulis, bracteis minutis oblongis, 2–5 mm. longis circ. 1.2 mm. latis. Flores rubri. Calyx usque ad tertiam partem basilarem 5-fidus, 5–6 mm. longus, extus subdense pilosus, segmentis linearibus obtusis. Corolla tubulosa leviter curvata, tubo cylindraceo, circ. 2 cm. longo, fausem versus sensim paullulo dilatato, extus sparse puberulo, intus glabro, lobis obliquiis semioblongo-quadratis, obtusissimis, margine glanduloso-ciliatis, circ. 4–5 mm. longis. Stamina in medio tubi inserta corollam haud superantia, filamentis tenuissimis glabris circ. 1.2 mm. longis, antheris oblongis circ. 1.5 mm. longis. Ovarium gracile, fere glabrum, cum stylum brevem sparse pilosum circ. 2 cm. longum.

stigmatis labia suborbicularia circ. 0.6 mm. longa pilosa.

No. 13870 KANEHIRA-HATUSIMA, Angi, Arfak Mts., April 8, 1940. In mossy forests near Iray, Lake Giji at about 1900 m. altitude.

This is easily recognized from all other allied species by its very small leaves with two teeth on their upper parts. In the form of the leaf, it is similar to that of *Dichrotrichum lobatum* SCHLTR., but is distinguished by its much smaller leaves with shorter petioles, slender branchlets, and shorter peduncles with fewer flowers.

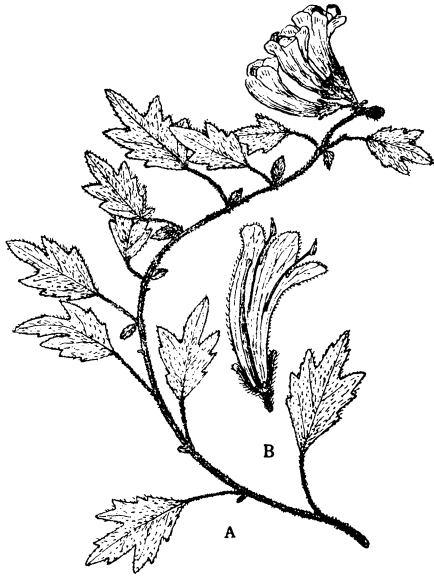


Fig. 5. *Dichrotrichum angiense*  
KAN. et HAT. (No. 13870)  
A Flowering branchlet  $\times \frac{1}{2}$ .  
B Flower in longit. section / —.

**Dichrotrichum multiflorum**

KANEHIRA et HATUSIMA sp. nov.

Fig. 6.

Suffrutex epiphyticus, parum ramosus, in ramis arborum longe repens, caules et rami flexuosi, laxe foliati, radicanes, primum pilis griseis circ. 3-4 mm. longis villosim vestiti demum villosuli. Folia opposita inaequimagna, chartaceo-coriacea, majora elliptica vel ovato-elliptica, 11-12.5 cm. longa, 6.5-7.8 cm. lata, apice subacuta, basi cuneato-rotundata, margine inaequaliter dentata, utrinque subdense hirsuta, 2.5-3 cm. longe petiolata, minora ovata, circ. 2 cm. longa, 1.4-1.7 cm. lata, apice obtusiuscula, basi rotundata, 3-4 mm. longe petiolata. Inflorescentiae axillares, umbellatim circ. 20-florae, bracteis parvulis ovatis 6-9 mm. longis, 4-6 mm. latis, utrinque hirsutis, pedunculo circ. 3.5 cm. longo 4 mm. crasso, villosulo, pedicellis circ. 1 cm. longis dense puberulis. Flores laete kermesini; calyx campanulatus usque ad medium fere 5-fidus, circ. 8 mm. longus, extus puberulus, lobis oblongis obtusis; corolla tubulosa extus pilosa circ. 4.5 cm. longa, tubo e basi angustiore ostium faucis versus sensim paullo amplicata, circ. 3.5 cm. longo, intus supra basin fasciculis 5 pilorum subulorum oronato, lobis semiquadratis, truncato-obtusissimis, margine minute glanduloso-ciliatis, circ. 1 cm. longis. Stamina in medio tubi inserta, corollam haud excedentia, filamentis filiformibus glabris circ. 2-2.5 cm. longis, antheris oblongis circ. 3 mm. longis, apicibus 2-nis cohaerentibus. Ovarium cum stylo brevi puberulo, sub anthesi circ. 3.5 cm. longum, stigmatibus labia quadrato-orbicularia, circ. 2 mm. longa.

No. 12002 KANEHIRA-HATUSIMA, Dallmann, Nabire, March 1, 1940. In *Agathis*-forests at about 500 m. altitude.

This is most closely related to *Dichrotrichum torricellense* SCHLTR., from which it differs by its larger leaves and denser inflorescences with shorter peduncles and longer calyces. This may also be contrasted with *D. chryostylum* SCHLTR. which has much longer peduncles and pedicels and fewer-flowered umbells.

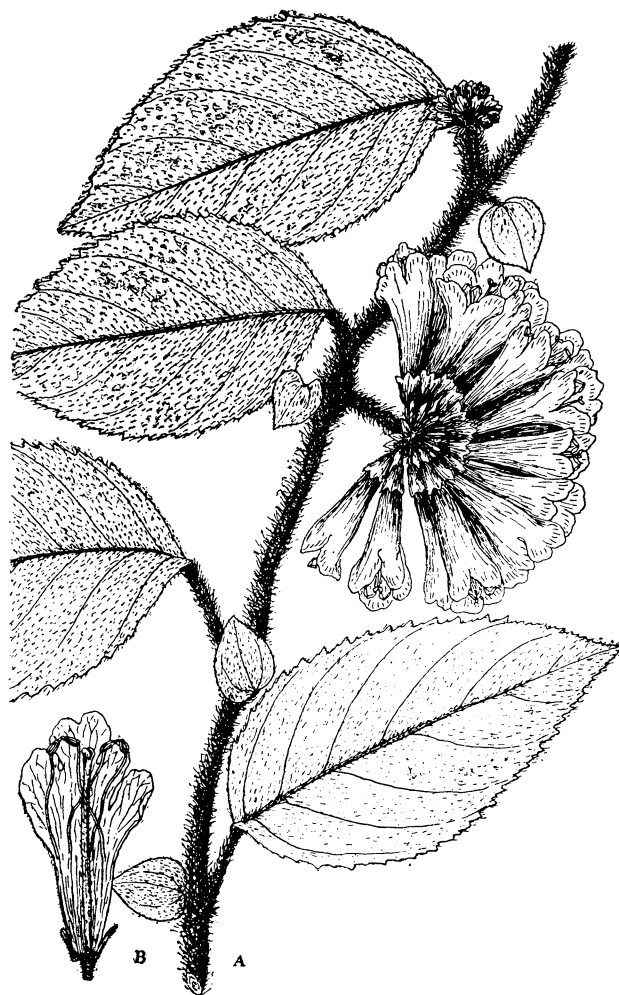


Fig. 6. *Dichrotrichum multiflorum* KAN. et HAT. (No. 12002)  
A Flowering branch  $\times \frac{1}{3}$ . B Flower expanded  $\times \frac{1}{2}$ .

***Dichrotrichum brevipes*** C. B. CLARKE in DC. Prodr. Contin. (1883) 55, f. IV; SCHLTR. l. c. 292.

No. 13800 KANEHIRA-HATUSIMA, Angi, Arfak Mts., April 7, 1940. In mossy forests, near Iray, Lake Giji at about 1900 m. altitude.

*Distrib.* Endemic; the type was from Arfak Mountains.

Our specimen slightly differs from the original description by having pilose inner-surface of the corolla.

**Cyrtandra** (§ *Prosthecisiphon*) **arfakensis** SCHLTR. in ENGL. Bot. Jahrb. l. c. 333, nom. nud. et Nova Guinea 14 (1926) 320. Fig. 7.

No. 13745 KANEHIRA-HATUSIMA, Angi, Arfak Mts., April 7, 1940. In mossy forests at about 1900 m. altitude.

*Distrib.* Endemic; the type was from Angi.

**Cyrtandra** (§ *Geodesme*) **aureo-sericea** KANEHIRA et HATUSIMA sp. nov. Fig. 8.

Suffrutex 1.5 m. altus, erectus, parce ramosus, terrestris, caulis et rami aureo-lanati. Folia inaequimagna, opposita, oblongo-elliptica vel oblonga, apice acuminata, basi oblique acuta, margine breviter serrato-dentata, supra sericeo-villosula, subtus aureosericeo-lanata, majora 33–35 cm. longa 10–12.5 cm. lata, minora 22 cm. longa circ. 9 cm. lata, petiolo 2–4 cm. longo 3 mm. crasso aurescento-lanato. Inflorescentiae ad basin caulis natae, in terram incumbentes, apice ramosae, sessiles, ramis sensim evolutis, nodulosis, dense multifloris, pilosis, bracteis caducis circ. 3.8 cm. longis 1 cm. latis oblongis acutis. Flores breviter pedicellati, pedicelli villosi, circ. 3 mm. longi. Calyx tubulosus, circ. 2.8 cm. longus, usque ad basin trilobatus, extus sparse hirsutus, lobis 2 anterioribus oblongis, posterioribus tridentatis. Corolla pallide flavescentia, tubulosa, sparse hirsuta, calycem paululo superans, tubo faucem versus sensim paullo amplicato, circ. 3 cm. longo 8 mm. lato, apice 5-ta parte apicali 4-lobata, lobis ovato-oblongis circ. 5 mm. longis 4 mm. latis, apice obtusis. Stamina fertilia 2, in supra medium tubi inserta, filamentis filiformibus circ. 5 mm. longis glabris, antheris ellipsoideis circ. 3 mm. longis. Ovarium cylindraceum, sparse hirsutum, 5–6 mm. longum apice in stylum clavatum circ.



Fig. 7. *Cyrtandra arfakensis* SCHLTR.  $\times \frac{1}{2}$ . (No. 13745)

1.8 cm. longum ut ovarium hirsutum transeuns, stigma subcapitatum apice bilobum circ. 1.8 mm. longum 2.5–3 mm. latum. Discus annularis glaber.



Fig. 8. *Cyrtandra aureo-sericea* KAN. et HAT. (No. 12634)

A Branchlet  $\times \frac{1}{3}$ . B Inflorescence  $\times \frac{1}{2}$ . C Calyx expanded.

D Corolla expanded (mag.) E Bract (mag.) F Fruit in l. s.  $\times \frac{2}{3}$ .

No. 12634 (type) KANEHIRA-HATUSIMA, Sennen, Nabire, March 8, 1940; in rain-forests at 300 m. altitude. No. 14117 KANEHIRA-HATUSIMA, Angi, Arfak Mts., April 10, 1940; in mossy forests along the trail to Angi at about 1500 m. altitude.

This may be contrasted with *Cyrtandra rhizantha* SCHLTR., from which it differs by having larger leaves with lanate indumentum and somewhat larger yellowish flowers.

***Cyrtandra*** (§ *Leucocyrtandra*) **Janowskyi** SCHLTR. in ENGL. l. c. 316, nom. nud et Nova Guinea l. c. 308. Fig. 9.

No. 11853 KANEHIRA-HATUSIMA, Chaban, Nabire, Feb. 28, 1940. In rain-forests at about 300 m. altitude. A slender shrub, 50 cm. in height, flowers white.

*Distrib.* Endemic; the type was from Jabi-Mountains, Geelvink Bay.

***Cyrtandra*** (§ *Macrocyrtandra*) **macrobracteata** KANEHIRA et HATUSIMA sp. nov.



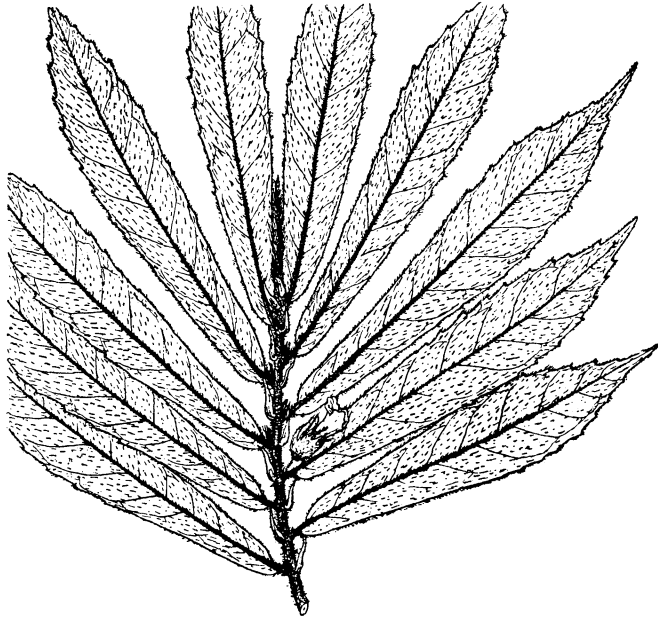


Fig. 9. *Cyrtandra Janowskyi* SCHLTR.  $\times \frac{1}{2}$ . (No. 11853)

Suffrutex, caulis simplex 1.5 m. altus, 1.5–2 cm. crassus glaber. Folia aequimagna, chartacea, subelliptica, apice acuta basi cuneatim angustata ad petiolum subsessile decurrentia, circ. 40 cm. longa 16 cm. lata, supra glabra subtus glabra nervis pallide fusco-puberula excepta, margine irregulariter denticulata. Inflorescentiae supraaxillares fasciculiformes, 5-vel 6-florae, pedunculatae, pedunculis 1–2 cm. longis 3–3.5 mm. crassis ad caulem longitudinaliter toto adnatis glabris, bracteis exterioribus obovato-ellipticis vel ovato-ellipticis, membranaceis circ. 4.5 cm. longis 2.5 cm. latis, saepius infra medium adnatis, interioribus minoribus oblongo-ellipticis circ. 2 cm. longis, membranaceis, glabris. Calyx oblongoideo-cylindraceus glaber,  $\frac{2}{5}$ -ta parte apicali 5-fidus, circ. 4.5 cm. longus, 1 cm. latus, segmentis e basi ovato-lanceolatis apice caudatim subulato-acuminatis, pedicelli 2–3 mm. longi. Corolla (in alabastro) extus supra medium dense fusco-hirsuta, intus sparse glandulosa, fauce dense glanduloso-pilosa, lobis ovalibus obtusis. Stamina ad medium tubum affixa, antheris ellipsoideis 5.5 mm. longis, ovarium cylindraceum, discus annularis circ. 1 mm. altus, stigma capitatum, glandulosum pilosum.

No. 13122 KANEHIRA-HATUSIMA, Waren, March 26, 1940. In rain-forests on limestone mountains, at about 600 m. altitude.

A very distinct species and is easily distinguished by its large elliptic leaves, adnated peduncles to the stem, large outer dimidiate bracts, and

densely haired corolla in its throat.

**Cyrtandra** (§ *Macrocyrtandra*) **caudata** KANEHIRA et HATUSIMA sp. nov.

Fig. 10.

Suffrutex circ. 60 cm. altus, caulis simplex circ. 8 mm. crassus superne fuscescendo-pubescentis. Folia opposita, anguste oblanceolata 40–44 cm.



Fig. 10. . . *Cyrtandra caudata* KAN. et HAT. (No. 11767)

A Fruiting shoot  $\times \frac{1}{3}$ . B Inflorescence, corolla fallen off  $\times \frac{1}{3}$ .

C Flower without corolla in longi. section  $\times \frac{1}{2}$ .

longa, circ. 10 cm. lata, margine remote denticulata, apice 2.5 cm. longe caudata, basi longe angustata, sessilia, chartacea, supra glabra, subtus molliter fuscescendo-villosula mox glabrata, nervis lateralibus circ. 20, ad prope marginem arcuatim adscendentibus ut costa subtus pallide fusco-villosis. Inflorescentiae (post anthesin) axillares, sessiles, fasciculiformes,

6- vel 7-florae, bracteis lanceolatis apice longe acuminatis, roseis, exterioribus circ. 4 cm. longis 8 mm. latis, margine remote denticulatis, interioribus 3 cm. longis, pedicellis 0.5–1 cm. longis 1 mm. crassis. Calyx oblongoideo-campanulatus circ. 3 cm. longus, 4-ta parte apicali 5-fidus, glaber, roseus, segmentis lanceolatis acuminatis, deorsum connivenibus. Cetera ignota. Fructus ovoideo-oblongoideus in sicco 12 mm. longus et 5 mm. latus, apice stylus 2 mm. longus coronatus, pedicelli fructiferes circ. 1.5 cm. longi.

No. 11767 *KANEHIRA-HATUSIMA*, Chaban, Nabire, Feb. 28, 1940. In rain-forests at about 300 m. altitude.

This is a new species of the Sect. *Macrocyrtandra*, and is most closely related to *Cyrtandra umbraticola* SCHLTR. differing by its much smaller leaves and more deeply lobed calyces. In spite of lacking corolla, our specimen is so distinct that we have no hesitation to describe it as a new species.

***Cyrtandra*** (§ *Macrocyrtandra*) sp. nov.?

Leaves sessile, oblong-ob lanceolate, acute at the apex, narrowly tapering toward the base, remotely denticulate, 20–24 cm. long, 4.5–5.5 cm. wide, brownish tawny pubescent beneath. This is a relationship of *Cyrtandra umbraticola* SCHLTR.

No. 11682 *KANEHIRA-HATUSIMA*, Nabire, Feb. 27, 1942. In high rain-forests at about 10 m. altitude. A shrub, 50 cm. in height.

***Cyrtandra*** (§ *Phaeotrichium*) ***rhynchotechoides*** HATUSIMA sp. nov.

Fig. 11.

Herba terrestris, erecta, circ. 80 cm. alta, caulis teres simplex bene foliatus, ferrugineo-tomentosus mox glabratus circ. 1 cm. crassus. Folia falcato-elliptica, membranacea, ad 30 cm. longa 7–9 cm. lata, apice longe acuminata, basi oblique acuminata, ad petiolum 3–4 cm. longum tomentellum decurrentia, margine breviter serrato-dentata, utrinque pilis stramiformibus subdense vestita, nervis lateralibus utrinque 17–19, supra leviter subtile prominente elevatis. Inflorescentiae in axillis foliorum singulae, pedunculatae, umbellato-decompositae pluriflorae, circ. 3.5 cm. longae, pedunculis 1–1.7 cm. longis 1 mm. crassis ut pedicelli ferrugineo-tomentellis, bracteis bracteolisque parvis ovatis circ. 4 mm. longis, margine intusque subdense hirsutis, pedicelli 3–6 mm. longi 0.5 mm. crassi. Calyx campanulatus 2/5-ta parte apicali 5-lobatus circ. 3 mm. altus, extus hirsutus, lobis ovatis apice acutis. Corolla parva, alba, calyceem circ. duplo superans, circ. 5 mm. longa, tubulosa, extus sparse hirsuta, intus glanduloso-pilosa, tubo cylindraceo circ. 1.8 mm. lato 4 mm. longo, faucem versus paullo dilatato, 3-ta parte apicali 5-lobato, lobis subpatentibus, rotundatis, 3 anterioribus quam

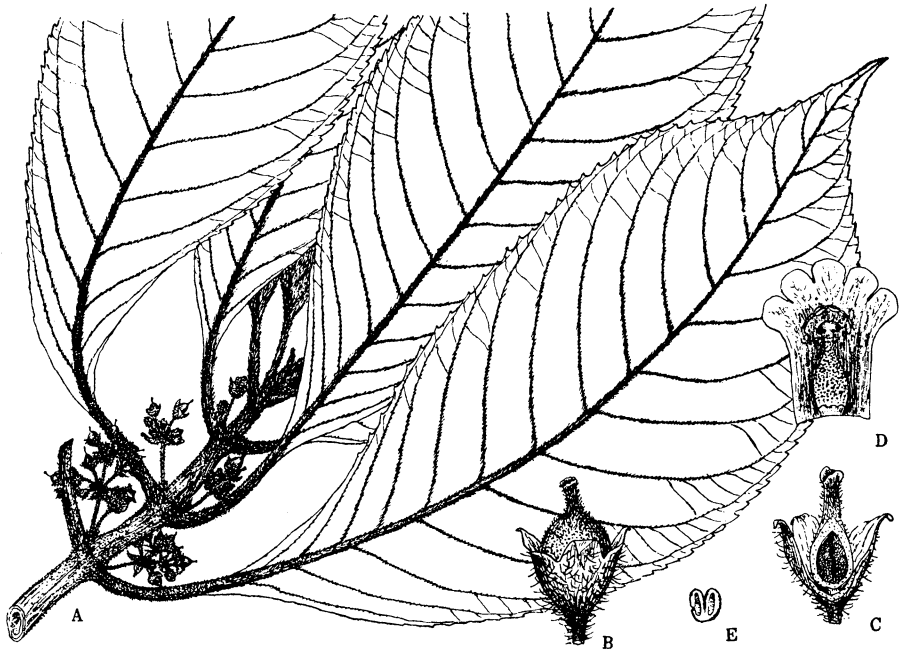


Fig. 11. *Cyrtandra rhynchotechooides* HAT. (No. 12755)

A Fructing shoot  $\times \frac{1}{3}$ . B Fruit  $\times 2$ . C Young fruit in l. s.  $\times 2$ .  
D Corolla expanded (mag.) E Anther (mag.)

posterioribus paullo minoribus. Stamina 2, in medium tubi inserta in tubo inclusa, filamentis circ. 1.5 mm. longis glabris, antheris ellipticis lateraliter dehiscentibus. Ovarium ovoideo-conicum glandulosum et apice sparsissime pilosum, circ. 2 mm. longum, apice in stylum brevem circ. 1 mm. longum transeans, discus annularis circ. 0.8 mm. altus glaber. Fructus ovoideus 4 mm. longus extus glanduloso-rugosus.

No. 12755 KANEHIRA-HATUSIMA, Boemi, Nabire, March 11, 1940. In rain-forests at about 300 m. altitude.

This may be contrasted with *Cyrtandra floribunda* K. SCHM. from which it differs chiefly by its much larger leaves with more numerous lateral nerves.

***Cyrtandra*** (§ *Diplochiton*, *Eucyrtandra*) ***nabirensis*** KANEHIRA et HATUSIMA sp. nov. Fig. 12.

Frutex parvus, caulis simplex bene foliatus, 15–20 cm. altus circ. 5 mm. crassus primum brunneo-villosus. Folia opposita plerumque 5- vel 6-juga, subaequimagna, chartacea, nunc oblongo-ovata nunc obovato-elliptica, apice acuta, basi angusta ad petiolum 1.5–2 cm. longum alatum decurrentia, margine crenulato-denticulata, 11–21 cm. longa, 4.5–9 cm. lata, subtus rugu-

losa, supra glabra, nervis lateralibus 8 vel 9, arcuatim adscendentibus, supra vix subtus bene elevatis, subtus ut costa nervisque dense ferrugineo-hirsutis. Inflorescentiae in axillis foliorum fasciculatae, subsessiles, pluriflorae, bracteis rhombico-ellipticis acutis 1-1.5 cm. longis 5-7 mm. latis, dorso dense rufo-hirsutis, pedicelli graciles circ. 2 mm. longi rufo-villosuli. Calyx oblongoideo-campanulatus 1-1.2 cm. longus 5-6 mm. latus, tertia parte superiore 5-fidus, extus brunneo-villosulus, segmentis e basi lanceolatis subulato-acuminatis 3-4 mm. longis. Corolla albida, tubulosa, tubo subcylindraceo 1.3-1.5 cm. longo faucem versus sensim paullulo amplicato, dorso sericeo-villoso, lobis 6, subaequiformibus subrotundatis 3-5 mm. latis. Stamina 2, fere in medio tubi inserta, staminoidea 0, filamentis filiformibus circ. 5 mm. longis glabris, antheris ellipticis apicibus connatis circ. 1 mm.

longis. Discus annularis glaber, apice truncatus, circ. 1 mm. altus. Ovarium cylindraceo-fusiforme, glabrum, circ. 2.5 mm. longum, apice in stylum subulatum circ. 5 mm. longum transeuns, stigma capitatum, satis magnum circ. 2 mm. latum.

Nos. 11684 (type), 11731 KANEHIRA-HATUSIMA, Papaya, Nabire, Feb. 27, 1940. In alluvial high rain-forests at about 200 m. altitude.

This may be contrasted with *Cyrtandra capitellata* C. B. CLARKE, from which it differs chiefly by its dwarf habit.

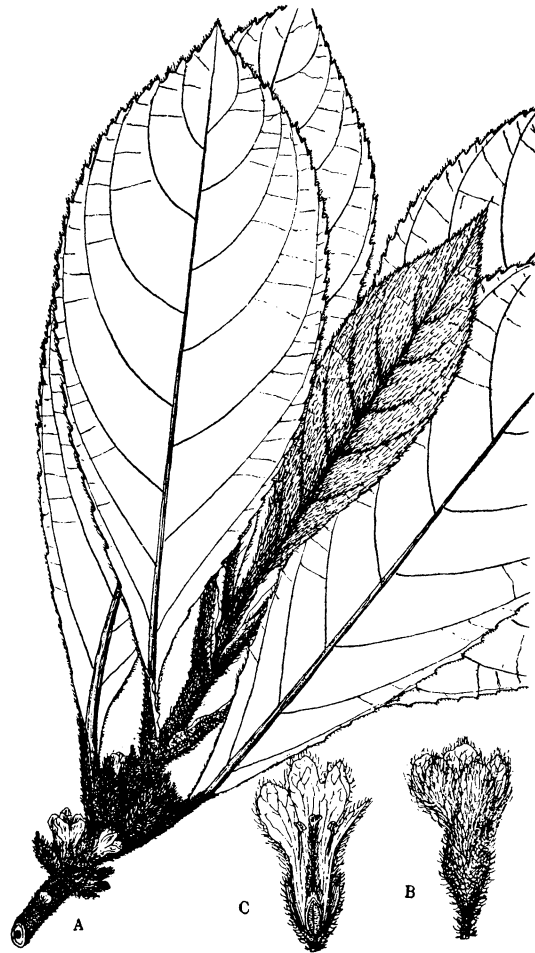


Fig. 12. *Cyrtandra nabirensis* KAN. et HAT. (No. 11684)

A Flowering shoot  $\times \frac{1}{3}$ . B Flower  $\times 2$ . C The same in longit. section  $\times 2$ .

**Cyrtandropsis nabirensis** KANEHIRA et HATUSIMA sp. nov. Fig. 13.

Frutex 1 m. altus, caulis simplex compressus teretibus fusco-flavescento-villosus, mox villosulus griseis, circ. 4 mm. crassus. Internodiis 2-3 cm. longis. Folia in quoque nodo singula, oblongo-oblanœolata, apice breviter acuminata, basi angustata ad petiolum circ. 1.3 cm. longus villosum oblique contracta, margine praesertim  $\frac{2}{3}$  superiore serrato-denticulata, chartacea, utrinque adpresse denseque hirsuta, supra mox glabrescentia, 20-22 cm. longa 6-7 cm. lata. Flores in axillis foliorum 3-5-ni fasciculati, sessiles, bracteis lanceolatis 1-1.3 cm. longis villosis, pedicelli breves villosi. Calyx

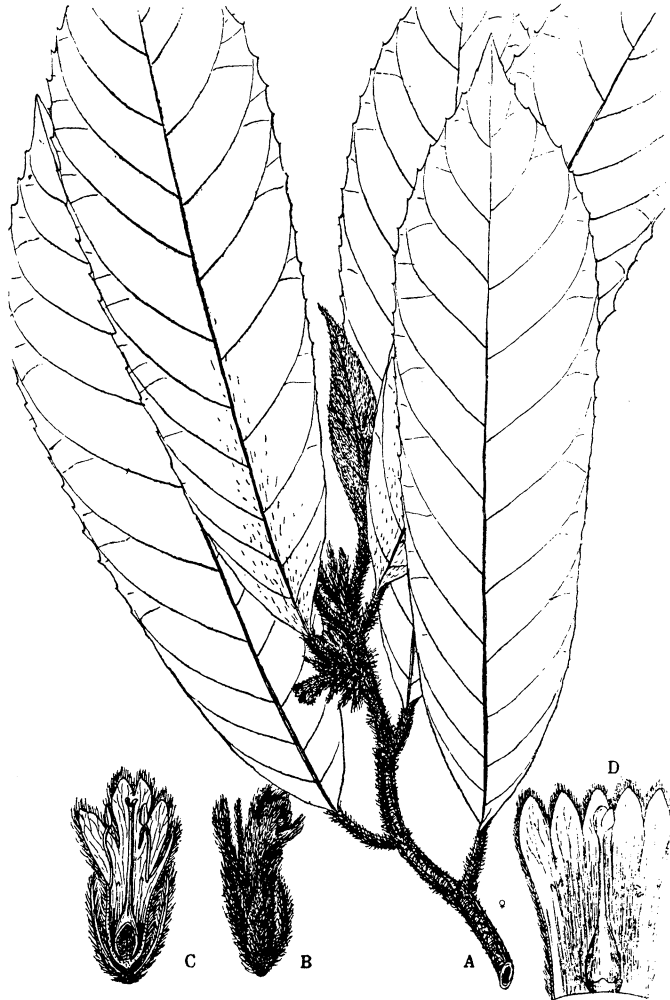


Fig. 13. *Cyrtandropsis nabirensis* KAN. et HAT. (No. 12619)  
 A Flower shoot  $\times \frac{1}{3}$ . B Male flower  $\times 2$ . C The same in l. s.  $\times 2$ .  
 D Female flower expanded  $\times 3$ .

tuberosus circ. 1.8 cm. longus supra medium 5-lobatus, extus villosus, lobis subulato-triangularibus circ. 1 cm. longis. Corolla luteo-albescens, quam calyx paullulo longiora, tubulosa extus villosa, tubo cylindraceo, circ. 1.5 cm. longo, lobis ovato-triangularis circ. 4 mm. longis, subacutis. Stamina supra medium tubi inserta, tubum parum excedentia, filamentis subulatis circ. 5 mm. longis glabris, antheris oblongis circ. 2.5 mm. longis. Ovarium anguste ovoideum glabrum 7 mm. longum 4 mm. latum apice in stylum subulatum circ. 8 mm. longum transeuns. Discus annularis pilosus.

No. 12619 KANEHIRA-HATUSIMA, Ayerjat, Nabire, March 8, 1940. In rain-forests on a rocky slope at about 300 m. altitude.

This may be contrasted with *Cyrtandra villosa* SCHLTR., from which it differs by its sessile polygamous flowers with villose corollae and calyces, and longer anthers.

**Epithema** BL. (determined by J. OHWI)

**Epithema Benthami** C. B. CLARKE in DC. Monogr. Phanerog. 5 (1883) 180; ROLFE in Journ. Bot. 23 (1885) 215; MERRILL, Enum. Philip. Fl. Pl. 3 (1923) 456.

No. 11848 KANEHIRA-HATUSIMA, Chaban, Nabire, Feb. 28, 1940. In high rain-forests at about 200 m. altitude. Flowers pale purple.

*Distrib.* Philippines and north-western New Guinea.

**Epithema calcicola** OHWI sp. nov. Fig. 14.

Herba cum scapis 10–20 cm. alta basi brevissime vel vix repens subacaulis, in sicco atro-cinereo-virens, omnibus partibus pilis brevissimis incurvis cinereis vestita. Folia omnia petiolata alterna subradicalia, laminae ovatae vel oblongo-ovatae herbaceae opacae 5–10 cm. longae 4–6 cm. latae supra cinerascete atro-virides, pilis brevissimis adpressis et rigidis pilis rigidis incurvis strigillosae, subtus cinereo-glaucae et pilis brevissimis dense puberulae, apice acutiuscule, basi subcordatae, margine irregulariter serrulatae, nervis secundariis utrinque 4–6 vix conspicuis sursum subarcuatis, petioli adscendentes 1–5 cm. longi dense puberuli non sulcati. Scapi erecti fere usque ad 20 cm. alti teretes densiuscule cinereo-puberuli nudi ex axilla foliorum solitarii simplices vel supra basin ternatim ramosi. Racemi scorpioidales dense multiflori 1–2.5 cm. longi, basi bractea lineari-lanceolata obtusula integra puberula patente deflexave persistente fulti, axi quam scapis vix crassiore, pedicellis 3–4 mm. longis patentibus puberulis, calyces 6–7 mm. longi, brevissime cinereo-puberuli vix conspicue nervosi primo tubulosi demum in fructu turbinato-obconici, ad vel ultra medium usque 5-fidi, lobis e basi latiore longe subulato-attenuatis erectis vertice tantum

raro adscendentibus vix acuminatis, fructu patentibus, corolla 10 mm. longa, tubo angusto calycis lobos vix superante intus fauce barbato, limbo bilabiato, labio superiore inferiore dimidio aequilongo obovato vertice retuso, inferiore fere usque ad basin tripartito, lobis oblongis obtusis. Stamina fertilia 2 glabra, inappendiculata, filamentis a medio incurvis 1.5 mm. longis, antheris vertice inter se subconnatis, sterilia 2 glabra inappendiculata, filamenta

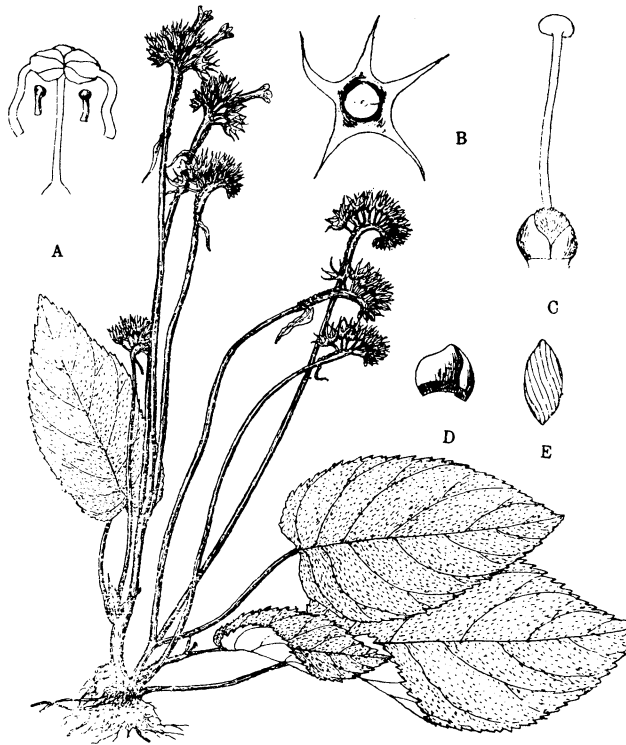


Fig. 14. *Epithema calicicola* OHWI (No. 13143)

- A Stamens and pistil (mag.) B Calyx expanded (mag.)  
 C Pistil with two glands (mag.) D Gland (mag.)  
 E Seed (mag.)

omnia basi connata lamellam brevem formentia. Ovarium subglobosum brevissime puberulum, glandulis 2 lamellatis orbiculatis glabris albis 1.2 mm. longis ac latis stipatum, stylo glabro 5 mm. longo, stigmate dilatato. Capsula compressa rotundato-truncata fere 3 mm. lata, semina oblonga utrinque acuta striata leviter torta. Bractea angusta integra ab affinis distincta.

No. 13143 KANEHIRA-HATUSIMA, Waren, 60 miles south of Manokwari, March 26, 1940. In rain-forests on limestone mountains at about 600 m. altitude. Leaves glaucous beneath, flowers pale blue.



**Monophyllaea** R. Br. (determined by J. OHWI).

**Monophyllaea furcipila** OHWI sp. nov. Fig. 15.

Herba, caules ca. 30 cm. alti basi 6-7, apice ca. 3 mm. diam. laeves praeter apicem infra brevissime puberulum glabri, supra leviter sulcati, basi adscendentes, radiculosi simul ac innovationes adventitias paucas gerentes. Folium unicum ad apicem caulis sessile, oblongo-ovatum basi profunde cordatum margine integrum, supra margineque pilis rigidis strictis simplicibus saepe septulatis sparse (parte basilari densius) hirtum, subtus obsolete punctulatum subglabrum, in costa media pilis brevibus a basi furcato-divisis dense pilosellum, supra atrovirens, subtus cinerascens, nervis lateralibus utrinque ca. 30. Pedunculo pauci (ca. 3) simplices vel sub racemo semel dichotome ramosi, basi interdum cum foliorum costa breviter adnati 5-8 cm. longi nudi, pilis brevibus bifurcatis sordide cinereis sparse praediti teretes, racemi scorpioidales dense multi-

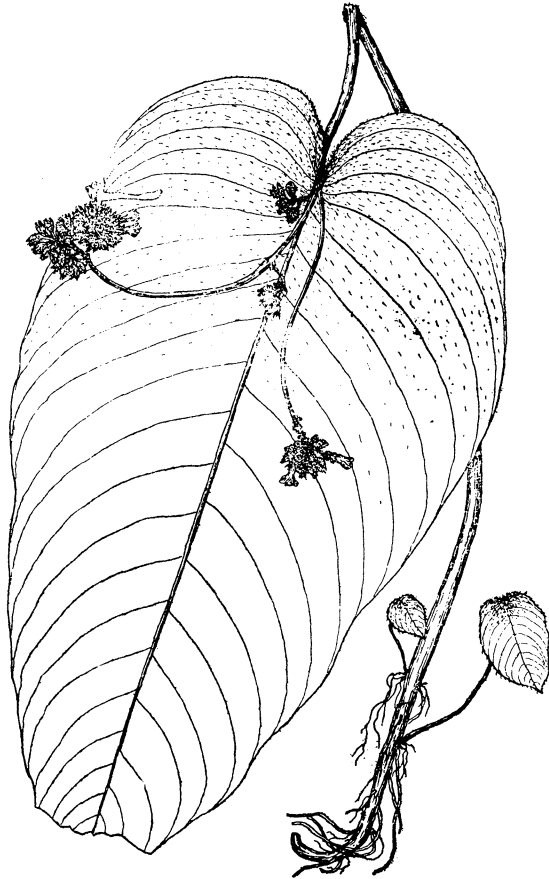


Fig. 15. *Monophyllaea furcipila* OHWI  $\times \frac{1}{2}$ .  
(No. 12436)

flori, axi quam pedunculi vix crassiore 1-1.5 cm. longa, flores albi, pedicelli ca. 5 mm. longi cum calyce pilis brevibus sordidis supra medium bifurcatis dense pilosi, calyces 4-5 mm. longi basi obtusi, ad medium usque 5-fidi lobis erectis ovatis acutis, corolla 8 mm. longa glabra, tubo brevi (2 mm.), intus fauce barbato, limbo sursum ampliato profunde bifido, lobo superiore quam inferiore duplo brevior bifida, inferiore 4 mm. longo flabellato medio brevissime puberulo 3-fido, lobulis omnibus orbiculatis 2 mm. longis ac latis ciliolatis. Stamina 4 fertilia, glabra, superiora profundius posita, filamentis

inappendiculatis. Ovarium glabrum subglobosum, basi disco humili carnosulo glabro disciformi stipatum, stylo crassiusculo glabro fere 2 mm. longo recto, stigmatate oblique truncato vix incrassato. Capsula ovato-conica subcompressa 3 mm. longa glabra, semina oblonga vel ovato-oblonga  $\frac{1}{4}$  mm. longa atro-clathrata. A speciebus adhuc in Nova Guinea notis glandulis nullis differt. Proxima videtur *M. glaucae* a qua tamen calycis lobis ovatis acutis diversa.

No. 12436 KANEHIRA-HATUSIMA, Patema, 40 km. inward of Nabire, March 6, 1940. On mossy limestone rock, in fringing rain-forests at about 300 m. altitude. Flowers white.

var. **pustulata** OHWI var. nov.

Differt a precedente, caule pustulato, foliis utrinque glabris, inflorescentiis pilis longioribus vestitis, calyce basi acuto, lobis angustis.

No. 12436a KANEHIRA-HATUSIMA, Patema, 40 km. inward of Nabire, March 6, 1940. On a mossy rock in fringing rain-forests at about 300 m. altitude.

**Sepikea cylindricarpa** SCHLTR. in ENGL. Bot. Jahrb. 58 (1923) 307, f. 7.

No. 12810 KANEHIRA-HATUSIMA, Prao, Nabire, March 11, 1940. In thicket of rocky banks along Boemi River at about 200 m. altitude. A herb, 1 m. in height, flowers white.

*Distrib.* Hitherto known only from north-eastern New Guinea.

Three flowers of our material were dissected, of which one having three fertile stamens, while other two flowers only two fertile stamens each.

#### S. HATUSIMA: Campanulaceae.

**Lobelia arfakensis** GIBBS, Contr. Phyt. & Fl. Arfak Mts. (1917) 183.

No. 13490 KANEHIRA-HATUSIMA, Angi, Arfak Mts., April 5, 1940. In mossy forests on south-western ridge above Lake Gita, at about 2000 m. altitude.

*Distrib.* Endemic; the type was from Angi.

**Pentaphragma macrophyllum** OLIVER in Journ. Linn. Soc. 15 (1875) 29; PULLE in Nova Guinea 8 (1910) 407, l. c. (1912) 691; MERR. et PERRY in Journ. Arnold Arb. 22 (1941) 384. Fig. 16.

Without number KANEHIRA-HATUSIMA, Chaban, Nabire, Feb. 28, 1940. In high rain forests at about 300 m. altitude.

*Distrib.* Endemic.



Fig. 16. *Pentaphragma macrophyllum* OLIV.  
A Branchlet B Flower in l. s. C Calyx  
D Petal

S. HATUSIMA: **Passifloraceae.**

***Adenia populifolia*** (ZIPPEL) ENGL. in ENGL. Bot. Jahrb. **14** (1892) 376;  
K. SCHUM. et LAUTB. Fl. Deutsch. Schutzg. Süds. (1901) 456.

No. 11564 KANEHIRA-HATUSIMA, Nabire, Feb. 25, 1940. A scandent.  
*Distrib.* Timor.

金平・初島 ニューギニア 植物研究 XVIII

金平亮三・初島住彦

## いはたばこ科

従来ニューギニヤカラ知ラレテキタ本科ノ植物ハ *Boea* (7 種), *Aeschynanthus* (33), *Euthamnus* (1), *Oxychamys* (1), *Dichrotrichum* (20), *Sepikea* (1), *Rhynchoglossum* (1), *Monophyllaea* (3), *Isanthera* (1), *Rhynchotechum* (1), *Cyrtandra* (95), *Cyrtandropsis* (16) 合計 12 属 181 種デ内 *Euthamnus*, *Oxychamys*, *Sepikea*, *Cyrtandropsis* ノ 4 属ハニューギニヤノ固有属デア。今回我々ノ採集シタ本科ノ植物ハ *Aeschynanthus* (3種), *Dichrotrichum* (3), *Monophyllaea* (1), *Sepikea* (1), *Cyrtandra* (8), *Cyrtandropsis* (1), *Didissandra* (1), *Epithema* (2) ノ合計 8 属 20 種デ中 *Didissandra*, *Epithema* ノ 2 属ハニューギニヤニハ新記録ノ属デア。尙 20 種中 13 が新種デアツタカラニューギニヤ産ノ本科ハ總計 14 属 194 種トナル。之ヲアフリカ (67 種), 馬來半島 (121 種), 比律賓 (70 種以上), 英領印度 (100 種以上), 馬來諸島 (250 種) 等ニ比較スル時, 調査ノ遅レテキルニューギニヤガ約 200 種ヲ有スルコトハニューギニヤノ本科ガ如何ニ種類ニ富ンデキルカ伺フコトガ出来ヨウ。

**Aeschynanthus** 印度, 熱帯アジア, 支那, 臺灣, 比律賓, 全馬來諸島, ニューギニヤニ分布シニューギニヤハソノ分布ノ東限ヲナシテキル。ポリネシア, 濠洲, ソロモン群島, ビスマーク群島等ニハ知ラレテキナイ。ニューギニヤノ本属ノ植物ハ通常藪林内ニ着生生活ヲ營ミ稀ニ石灰岩上ニ生ヘ 2000 米ニ及ブトガアル。

**A. nabirensis** K. et H. SCHLECHTER ノ *Anisocalyx* 節ニ属スル珍種デ *A. pachyanthus* SCHLTR. ニ近縁デア。葉ハ小サク, 花序ハ 2 花ヨリナリ, 萼片ハ大, 雄蕊ノ長キ點デ容易ニ區別出来ル。

**Didissandra novoguineensis** K. et H. 本属植物ハマレーシヤニ廣ク分布シ, ニューギニヤニ未記録デアツタガナビレ奥地ノ熱帯降雨林内デ一新種ヲ發見シタ。

**Dichrotrichum** 本属ハニューギニヤヲ分布ノ中心地並ニ東限トシ, 西方ハモルツカ諸島, セレベス島ヲ越ヘ比律賓ニ及ンデキル。ニューギニヤノ本属ノ植物ハ通常藪林ノ着生植物デ長イ匍匐莖デ樹幹ニ着生シ, 對生セル 2 枚ノ葉ハ大サ不同デ, 花ハ大キク, 燃ヘル様ナ赤色ヲ呈シタモノガ多イ。

**D. angienne** K. et H. アンギ湖イライ村附近ノ藪林内ニ見ラレル極メテ可愛イ一種デ, 花及葉ガ小サイノガ特徴デア。

**D. multiflorum** K. et H. ダルマン地方ノ森林内ニ稀産スル一種デ大形ノ花ヲ多數着ケタ花序ガ特徴デア。

**Cyrtandra** 本属ハニューギニヤカラ既ニ 100 種近クモ知ラレ將來倍加スルコトハ容易ニ想像出来ル。極メテ多型的デ最高度ニ分化シ, 低地カラ 3300 米ノ高地迄分布シテキル。生活形ハ草本及灌木デ通常地上性デア。ガ稀ニ着生ノモノモ見ラレル。大部分ノモノハソノ分布区域ハ狭ク各峯, 各谷ニ限ラレテキル場合ガ多イ。

**C. aureo-sericea** K. et H. 地下ニ花序ガ出来ル *Geodesme* 節ノモノデ黄金色ノ

絹毛デ密ニ被ハレタ小枝及葉ガ著シイ特徴デアル。

**C. macrobracteata** K. et H. *Macrocyrtandra* 節ニ屬スル灌木ガカツタ丈夫ナ草本ガ花梗ガ莖ト密着シテキルノト、花序ノ苞ガ著シク大キイノガ特徴デアル。

**C. rhynchotrichoides** HATUS. いぬやまびはさうヲ思ハセル丈夫ナ草本デ *Phaeotrichum* 節ニ屬シテキル。

**Cyrtandropsis** 一見 *Cyrtandra* ニ似テキルガ花ハ兩全花デナイ點ヲ異ニシテキル。ニューギニヤ特産ノ屬デ大部分ノモノハ對ヲナセル葉ノ一方ガ退化シ互生葉ノ様子ヲ呈シテキル。高さ 1-1.5 米位ノ地上性灌木デ稀ニ着生トナルコトガアル。山地、丘陵地ニ多ク藪林以上ニ昇ルコトハ稀デアル。

**C. nabirensis** K. et H. ナビレ奥ノ熱帯降雨林内デ發見シタ一種デ *C. villosa* SCHLTR. ニ最モ近い種類デアル。

**Epithema** 印度、佛印、比律賓カラ馬來諸島ニ廣ク分布スル屬デ、從來ニューギニヤニハ知ラレテキナカツタガ今回 2 種ヲ發見スルコトガ出來タ。本屬ノモノハ總テ一年生ノ草本デ熱帯降雨林内ノ石灰岩上ニ好ンデ生育シテキルコトハ次ノ *Monophyllaea* 屬ト同一デアル。

**Monophyllaea** マラツカ、泰國、スンダ列島、比律賓、ニューギニヤニ互リ約 16 種ヲ産スル。一年生草本デニューギニヤデハ通常 300~2000 米ノ間ノ石灰岩上ニ生育。從來ニューギニヤカラ 3 種知ラレテキタガ今回更ニ次ノ一新種ヲ發見シタ。

**M. furcipila** OHWI 本種ハ從來ニューギニヤカラ知ラレテキタ種類トハ花梗ニ腺ガナイ點デ異ナツテキル。一番近いノハボルネオ産ノ *M. glauca* C. B. CLARKE デアルガ萼片ノ形ヲ異ニシテキル。

**Sepikea** ニューギニヤ特産ノ屬デ 2 個ノ成熟雄蕊ヲ有スル點デ *Epithema* 屬ニ近いガ全體ノ様子ハ *Cyrtandra* 屬ヲ思ハセル。一屬一種ノ植物デ低地ノ熱帯降雨林内ニ見ラレル。

利用方面 *Dichrotrichum* 及 *Aeschynanthus* ノ類ハ美麗ナル花ヲ着ケルモノガ多イカラ觀賞的價値ガアル。

### ききやう科

ニューギニヤ産ノききやう科ハ *Campanumoea* (1種), *Lobelia* (2), *Phyllocharis* (2), *Pratia* (1), *Pentaphragma* (1) ノ 5 屬 7 種カラナリ固有屬トシテハ *Phyllocharis* 屬ダケデ、他ハ總テアジア系ノ屬デアル。今回我ハ 2 屬 2 種ヲ採集シタガ既知種バカリデアツタ。

**Lobelia arfakensis** GIBBS アンギ湖ノ海拔 2000 米附近ノ藪林内ニ見ラレル匍匐性ノ草本デ臺灣ノさくらださうヲ思ハセル。

**Pentaphragma macrophyllum** OLIVER 一見いはたばこ科ノ *Cyrtandra* 屬ヲ思ハス 1 米位ノ草本デ沖積層上ノ熱帯降雨林内ニ多ク、大形ノ黄色花ハ美麗デアル。

### とけいさう科

本科ノ植物ハニューギニヤニハ種類少ク *Adenia* 屬ダケデアル。

**Adenia populifolia** ENGL. うり科ノ植物ヲ思ハセル蔓性草本デ低地ノ二次林内ニ見ラレル。