The Kanehira-Hatusima 1940 Collection of New Guinea Plants. I.

By

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Received May 5, 1941.

In 1940 I fortunately had an opportunity of botanizing in Netherlands New Guinea. Accompanied by Mr. S. HATUSIMA, lecturer in dendrology at Kyusyu Imperial University, we proceeded to Java with the objective of visiting the Botanical Gardens at Buitenzorg to confer with botanists there, familiarize ourselves with essential literature, and at the same time to arrange for advice and assistance regarding our proposed trip to New Guinea. We arrived at Manokwari on February 20 and three days later proceeded to Nabire which is situated at the head of Geelvink Bay. This settlement is located at the mouth of the Nabire River which flows into the bay at that point. There the Nanyô Kôhatu Kaisya (South Seas Developing Company) maintains a depot for the receipt of dammar. This product is transported from Dallmann which is situated inland about 50 km. south of Nabire at an altitude of 500–800 m., where the company has a dammar concession. A botanical trip was made along the trail to Dallmann and we returned in canoes on the Boemi River. This region is for the most part an undulating plain covered with dense primary forests, and the banks of both the Nabire and Boemi Rivers are usually flooded in the rainy seasons. Sixteen days were devoted to this field work.

A second objective was to botanize in the vicinity of Lake Angi. We arrived at Momi on March 19. This is a village about 40 miles south of Manokwari, and here the Developing Company maintains plantations for jute and cotton. After spending two weeks botanizing in the vicinity of Momi, we left for Lake Angi on April 4, escorted by a military guard and accompanied by the Controller Mr. MUELDER. Four days were used for the trip in and out and we spent four days in the vicinity of the Lake.

During the time we spent in New Guinea, about 2,851 numbers were collected with the following result.

In accordance with our agreement with the Netherlands East Indies authorities a nearly complete set of duplicate specimens has been sent to the herbarium of the Buitenzorg Botanical Garden, and an additional set of duplicates is also sent to the Arnold-Arboretum of Harvard University. Special groups have been studied by the following botanists: Dr. H. Ito,

Map of Netherlands New Guinea, showing localities botanized.

			Woody	Herbaceous	Total
Pteridophytes			11	300	311
Dicotyledons	Gymnosperms		14	—	14
	Angiosperms	Polypetal	753	66	819
		Gamopetal	383	77	440
Monocotyledons			82	339	421
Total species			1,223	782	2,005

Pteridophyta; Dr. S. KITAMURA, *Compositae*; Dr. T. TUYAMA, *Orchidaceae*; and Dr. J. OHWI, *Cyperaceae* and *Gramineae*. We are under obligations to the government authorities of the Netherlands East Indies in granting us permission to undertake the field work and for assistance and courtesies shown to us during the time that we were in the Archipelago.

PANDANACEAE*

Freycinetia GAUDICHAUD

§ *Oligostigma*.

(1) ***Freycinetia angustissima*** RIDLEY Journ. Bot. **24** (1886) 359; MARTELLI Webbia **3** (1910) 309; MERR. et PERRY Journ. Arnold Arb. **21** (1940) 163.

Freycinetia stehophylla WARBG. in K. SCHUM. et LAUTERB. Fl. Deutsch. Schutzgeb. Südsee Nachtr. (1905) 53; MARTELLI Webbia **3** (1910) 315, Journ. Arnold Arb. **10** (1929) 137; WHITE *ibid.* 201; MERR. et PERRY *ibid.* **20** (1939) 141.

Freycinetia polyclada MERR. et PERRY Journ. Arnold Arb. **20** (1931) 141.

No. 12792 KANEHIRA-HATUSIMA, between Boemi and Prau, about 40 km. inland from Geelvink Bay, March 11, 1940. Along a trail, at about 300 m. altitude.

The plant sprouts many branches, climbs the tree trunk forming a bush. The trigonous branchlets, very small leaves and globose fruit heads are the characteristics of the species.

Distrib. Widely spread in New Guinea.

(2) ***Freycinetia Beccarii*** SOLMS-LAUBACH, Ann. Jard. Bot. Buitenz. **3**

* For assistance in the identification of the family, I am greatly indebted to Dr. E. D. MERRILL and Dr. L. M. PERRY of the Arnold Arboretum.

(1883) 100; F. MUELLER, Notes Papuan Pl. **2** (1890) 68; WARBG. Pflanzenr. **3** (IV, 9) (1900) 30; MARTELLI *Webbia* **3** (1910) 309; RENDLE in GIBBS, Contr. Phytog. Fl. Arfak Mts. (1917) 198; MARTELLI, Journ. Arnold Arb. **10** (1929) 137; WHITE *ibid.* 201; MERR. et PERRY *ibid.* **20** (1939) 142.

No. 11752 KANEHIRA-HATUSIMA, Nabire, Feb. 27, 1940. In thickets at low altitudes.

Fig. 1. *Freycinetia angustissima* RIDL.

Though sterile specimen, it is a striking species. A very small climber, leaves membranaceous, smooth, 3–4 cm. long, 5–10 mm. wide.

Distrib. Known also from British New Guinea.

(3) ***Freycinetia cruciger*** KANEHIRA, sp. nov. § *Oligostigma*. Fig. 2.

Totus caulis foliaceus; ramulis 3–5 mm. crassis, internodiis 5–7 mm. longis, ad nodos multo radicanes, foliis dissitis, oblongo-ovatis, coriaceis, 5–6 cm. longis, amplexicaulibus, basi 1.5 cm. latis, apice acuminatis, acumne acute mucronato, margine revolutis, margine et costa subtus minute-brevi-

terque incerte spinulosis, longitudinaliter prominente venoso-striatis, auriculis haud liberis, 5 mm. longis, margine pectinatis, pectinibus 2-lobatis, spathis foliis similis sed late triangularibus, margine sparse pectinatis. Infructescentiis axillaribus, pedunculo communi 4 mm. diametro, syncarpiis globosis, 1.6 cm. diametro, pedunculatis, pedunculo 7 mm. longo, laevi; baceis succulentis, fusiformibus, 8 mm. longis, 3 mm. crassis, angulatis, apice acute pyramidatis, basi confluentibus, stigmatibus 3, annulo angusto cinctis, seminibus 3-seriate dispositis, oblongis, circiter 1 mm. longis, vulgo rectis, raphe raphidophora, strophilo nullo.

No. 12286 KANEHIRA-HATUSIMA, DALLMANN, March 3, 1940. In open-cut forests at about 600 m. altitude.

The plant is provided with leaves throughout the stem, and numerous roots sprouting from the nodes, the stem and leaves closely attach to the trunk of the

tree from its foot straight upward. The leaves are somewhat grayish green and expanded flatly, the two leaves on both sides of the stem and the middle one lying in cross way. We saw many sterile plants in the forests but the fruiting seems to be very seldom and we could get only one specimen. The fruits are succulent. This is a very characteristic species.

Fig. 2. *Freycinetia cruciger* KANEH.

- A Branchlet with fruits $\times \frac{1}{2}$.
- B Upper part of the drupes $\times 1.5$.
- C Drupe $\times 2.5$.
- D Long. section of the same (8 $\times$ 3 mm).
- E Cross section of the same.
- F Seed $\times 9$.

(4) ***Freycinetia Hollrungii*** WARBG. Pflanzenr. **3** (IV, 9) (1900) 30 et K. SCHUM. & LAUTERB. Fl. Deutsch. Schutzgeb. Südsee (1900) 161; MARTELLI Webbia **3** (1910) 311; MERR. et PERRY Journ. Arnold Arb. **20** (1939) 145.

Fig. 3. *Freycinetia Hollrungii* WARBG.

A Branchlet with fruits $\times \frac{1}{2}$.	D Apical view of the drupes $\times 2.5$.
B Drupe $\times 3$ (6×4 mm.).	E Cross section of the same.
C Long. section of the same.	F Seed $\times 8$ (1 mm.).

Nos. 12202, 12260 KANEHIRA-HATUSIMA, Dallmann, March 3, 1940. In primary forests at about 600 m. altitude.

The plant is quite identical with the specimen sent from the Arnold Arboretum, assigned to *Freycinetia Hollrungii*. Infructescence sometimes lateral.

Distrib. Known only from New Guinea.

(5) ***Freycinetia Inouei*** KANEHIRA sp. nov. § *Oligostigma*. Fig. 4.

Caulibus teretibus, 2–3 cm. crassis; foliis confertis, erecto-ascendentibus, rigidiuscule coriaceis, 45–60 cm. longis, ± 2.5 cm. latis, apice acuminatis, basi plus-minusve dilatatis et acute plicatis, vaginantibus, longitudinaliter

venoso-striatis, subtus perspicue tessellatis, margine supra basim per spatium breve denticulatis, versus apicem minutissime denticulatis, costa media subtus in parte superiore minute spinulosa; auriculis fragilibus, integris, 10–13 cm. longis, 2 cm. latis, haud liberis. Infructescentiis terminalibus, pedunculo communi tereti, laevi, syncarpiis 3, cylindraceis, 10 cm. longis, 3 cm. diametro, pedunculis angulis, 6 cm. longis, laevibus, baccis succulentis, confertis, linearibus, 12 mm. longis, in sicco 2–3 mm. crassis, stigmatibus vulgo 2, annulo angusto cinctis, seminibus fusiformibus, utrinque angustatis, 1.2 mm. longis, raphe crassa, raphidophora, strophiole nullo.

No. 12163 KANEHIRA-HATUSIMA, Dallmann, March, 2, 1940. Climbing on a tall tree in forests at about 700 m. altitude.

The leaves are rigid, erect and straight, and tinged with purple colour when fresh. The syncarp splits transversely when dried. No doubt, this is very close to *Freycinetia Archboldiana* MERR. et PERRY, but in comparing with the type, I found my species has much thicker syncarp with much more slender and numerous drupes. It is named after Mr. YOSIO INOUE of Nanyô Kôhatu Kaisya who took charge of us, while we botanized in Nabire. He also found and collected many plants for us in our journey.

Fig. 4. *Freycinetia Inouei* KANEH.

- A Infructescence $\times \frac{1}{2}$.
- B Drupe $\times 8$ (12×2.5 mm.).
- C Long. section of the same.
- D Apical portion of drupe.
- E Cross section of the same.
- F Seed $\times 9$ (1.2 mm.).

(6) *Freycinetia Klossii* RIDLEY Trans. Linn. Soc. 2 Bot. 9 (1916) 236; MERR. et PERRY Journ. Arnold Arb. 20 (1940) 146.

No. 12053 KANEHIRA-HATUSIMA, Dallmann, March 1, 1940; Nos. 12161, 12162, 12200 Dallmann, March 2, 1940; Nos. 12201, 12262, Dallmann, March 3, 1940. No. 12508 KANEHIRA-HATUSIMA, Sennen, Boemi, March 6, 1940.

The species is very common in Nabire District. Leaves imbricate, linear, 30–40 cm. long, 1.5–2 cm. wide, margin minutely serrate except the middle part, auricles membranaceous, up to 5 cm. long; syncarps usually 3, globose, 2–3 cm. long, somewhat succulent, scarlet when ripe, strophiole of

the seeds lacking.

Distrib. Also known from British New Guinea.

Fig. 5. *Freycinetia Klossii* RIDL.

A Branchlet with fruits $\times \frac{1}{2}$.	E Apical portion of drupe.
B Basal part of leaf.	F Cross section of the same.
C Drupe $\times 3$ (9×2.5 mm.)	G Seed (1.5 mm.).
D Long. section of the same.	

(7) ***Freycinetia lacinulata*** KANEHIRA sp. nov. § *Oligostigma*. Fig. 6.

Caulibus $\pm$ trigonis, 5–6 mm. crassis, internodiis 1.5 cm. longis; foliis dissitis, patentibus, submembranaceis, linearibus, 20–25 cm. longis, 1.5 cm. latis, apice sensim attenuato-acuminatis, basi angustatis, subamplexicaulibus, in parte apicali minutissime spinoso-denticulatis, caeterum laevibus, utrinque longitudinaliter venoso-striatis, auriculis 2–2.5 cm. longis, laci-

nulatis. Infructescentiis terminalibus, syncarpiis 2 vel 3, ellipsoideis, 20 mm. longis, pedunculatis, pedunculis 1.5 cm. longis, laevibus; baccis prismaticis, 4.5 mm. longis, 2 mm. crassis, apice rotundatis vel subtruncatis, stigmatibus 2 vel 3, annulo laevi, seminibus fusiformibus, utrinque angustatis, vix 1 mm. longis, raphe raphidophora, strophio nullo.

Fig. 6. *Freycinetia lacinulata* KANEH.

A Branchlet with fruits.	D Cross section of the same.
B Drupe $\times 4$ (4.5 $\times$ 2 mm.).	E Apical portion of drupes $\times 5$.
C Long. section of the same.	F Seed (1 mm.).

No. 12054, KANEHIRA-HATUSIMA, Dallmann, March 1, 1940; No. 12157 KANEHIRA-HATUSIMA, the same locality, March 2, 1940.

Yellowish green leaves when dried, thread-like auricles and bright yellowish ellipsoid syncarps with nearly truncate apex of the drupes are

the distinguished characters of the species. The present species is very closely allied to *Freycinetia Brassii* MERR. et PERRY from British New Guinea, but the syncarps of the latter is oblong to cylindrical, brown to orange-red coloured.

Fig. 7. *Freycinetia latiauriculata* KANEH.

A Branchlet with fruits $\times \frac{1}{2}$.	D Long. section of the same.
B Basal portion of leaf.	E Apical view of drupe $\times 8$.
C Drupe $\times 4$ (6×1.2 mm.).	F Seed (0.6 mm.) (immatured).

(8) ***Freycinetia latiauriculata* KANEHIRA sp. nov. § *Oligostigma*.** Fig. 7.

Caulibus foliaceis, 8–10 mm. crassis, internodiis 1.5 cm. longis; foliis confertis, imbricatis, subcoriaceis, 40–60 cm. longis, circiter 2 cm. latis, apice sensim acuminatis, $\pm$ recurvatis, basi vaginantibus, supra valde, subtus longitudinaliter venoso-striatis, obscure tessellatis, margine toto et costa supra media subtus breve remotiusculèque spinoso-denticulatis; auriculis late lanceolatis, usque ad 6 cm. longis, 1 cm. latis, scarioso-membranaceis, adnatis. Infructescentiis terminalibus, syncarpiis cylindraceis vel oblongo-

cylinraceis, 4–5 cm. longis, 1.5–2 cm. diametro, pedunculatis, pedunculis 3 cm. longis, laevibus; baccis (immaturis) lineariformibus, 6 mm. longis 2 mm. crassis, apice acutis, stigmatibus 1–3 (vulgo 3), annulo anguste cinctis, seminibus vix 0.6 mm. longis, raphe crassa, raphidophora, strophilo nullo.

No. 12287 KANEHIRA-HATUSIMA Patema, about 40 km. from the shore, March 4, 1940. In forest edge at about 600 m. altitude.

The plant is characterized by very broad entire auricles.

(9) ***Freycinetia linearis***

MERR. et PERRY Journ. Arnold Arb. 21 (1940) 164.

No. 13972 KANEHIRA-HATUSIMA, Iray, Angi-Lake, April 8, 1940. In dense primary forests at about 2,000 m. altitude.

Scandent plant, covering the trunk of a tree; leaves linear, rigidly coriaceous, 20–30 cm. long, 4–5 mm. wide, strongly vaginant at the base, auricles 3–4 cm. long, 4–5 mm. wide; syncarps oblong, 3 cm. long, 1 cm. in diameter, upper part of the peduncle scabrid.

The type form 12 km. northeast of Lake Habbema at 2,600 m. altitude. *Distrib.* New Guinea.

Fig. 8. *Freycinetia linearis* MERR. et PERRY.

A	Branchlet with fruits.	same.	
B	Basal portion of leaf.	E	Apical view of drupe.
	× ½.	F	Cross section of the
C	Drupe (4 × 1 mm.).		same.
D	Long. section of the	G	Seed × 10 (1 mm.)

(10) ***Freycinetia oblanceolata*** MARTELLI, Webbia 3 (1910) 176, 313; RENDLE in GIBBS, Contr. Phytog. Fl. Arfak Mts. (1917) 197; MERR. et PERRY Journ. Arnold Arb. 20 (1939) 144.

Nos. 12681, 12684 (fr.) KANEHIRA-HATUSIMA, Slieber-Boemi, March 9,

1940, in thin open forests. No. 12570 (♂ flos) KANEHIRA-HATUSIMA Sennen, March 7, 1940, in forests near Boemi River. No. 14113 (fr. immat.) KANEHIRA-HATUSIMA, North-Pole, Angi-Gita, April 10, 1940, in forests near the Lake at about 2,000 m. altitude.

Scandent; leaves coriaceous, scattered, lanceolate to oblanceolate, 15–18 cm. long, up to 4 cm. wide, apex obtuse or obtusely apiculate, entire except the apex, auricles membranaceous, caducous. Syncarps 3 or 4, oblong to ovoid, 5 cm. long, 2–2.5 cm. in diameter, often falcate, peduncles smooth, stigma 1–3, seeds 1.2 mm. long, raphe with raphides, strophiole lacking.

Fig. 9. - *Freycinetia oblanceolata* MARTELLI.

A	Branchlet with fruits $\times \frac{1}{2}$.	D	Apical view of drupes $\times 2.5$.
B	Drupe $\times 3$ (8 $\times$ 3 mm.).	E, F	Cross section of the drupe $\times 4$.
C	Long. section of the same $\times 3$.	G	Seed.

Distrib. Known also from British New Guinea.

(11) ***Freycinetia platyphylla*** KANEHIRA sp. nov. § *Oligostigma*. Fig. 10.

Scandens; caulibus ± 2 cm. crassis; foliis crasse coriaceis, in apicem ramulorum confertis, lomariformibus, 120 cm. longis, ad basim 7–8 cm. latis, apicem versus abrupte attenuatis, basi breviter vaginantibus, longitudinaliter conspicue venosis, in sicco perspicue tessellatis, marginibus in partibus basilaribus et in apicibus breviter minuteque spinoso-denticulatis, caeterum remotiuscule denticulatis, costa media subtus in parte superiore sparse denticulata; auriculis usque ad 10 cm. longis, haud liberis. Infructescentiis terminalibus, pedunculo communi $\pm$ trigono, 1.2 cm. crasso, laevi, syncarpiis ternis, cylindraceis, 10–12 cm. longis, 3–3.5 cm. latis, pedunculis 5–6 cm. longis, angulatis, laevibus; baccis succulentis, numerosissimis, confertis, linearibus, 10–12 mm. longis, in sicco vix 1 mm. latis, angulatis, apicem versus angustatis, stigmatibus plerumque 2, annulo angustocinetis, seminibus immaturis.

No. 12285 KANEHIRA-HATUSIMA, Dallmann-Patema, March 4, 1940. In forests at about 600 m. altitude.

This is very near *Freycinetia tessellata* MERR. et PERRY, but is distinguished by its glabrous peduncles; it is also near *Freycinetia ponapensis* MARTELLI but is separable by the rather obtuse tips of the leaves and the much longer syncarps.

Fig. 10. *Freycinetia platyphylla* KANEH.

- A Infructescence.
- B Drupes $\times 3.5$.
- C Long. section of the same. (10–12 mm.).
- D Apical view of drupe $\times 10$.
- E Cross section of the same.

(12) ***Freycinetia rectangularis*** KANEHIRA sp. nov. § *Oligostigma*. Fig. 11.

Rami tereti, 7 mm. crassi, internodiis 1.8 cm. longis, ad nodos spinis praeditis, spinis conoideis, 2 mm. longis, ramulis frugiferis inermibus, foliis

disstitis, patulis, lanceolatis, membranaceis, 6–8 cm. longis, 1.6–2.0 cm. latis, utrinque subacutis, abruptiuscule in acumen brevem abeuntibus, nervis parallelis, prominentibus, margine fere laevibus, apice tantum minutissime spinulosis, auriculis probabiliter caducis. Infructescentiis terminalibus, syncarpiis 2, ellipsoideis, 2 cm. longis, 1.4 cm. crassis, pedunculatis, pedunculis 2.2 cm. longis, laevibus, baccis cylindraceis, 4 mm. longis, 2 mm. latis, apice rotundatis, vertice foveolatis, stigmatibus 2 vel 3, saepius 4, seminibus vix 0.5 mm. longis, raphe inconspicua, strophio nullo.

No. 12383 KANEHIRA-HATUSIMA, Sennen, Nabire, March 6, 1940. In primary forests at low altitudes.

A small climber, stem armed with spines, young fruiting branchlets

Fig. 11. *Freycinetia rectangularis* KANEH.

- A Branchlet with fruits $\times \frac{1}{2}$. C Long. section of the same. E Cross section of drupe.
B Drupe $\times 4.5$ (4×2 mm.). D Apical view of the drupes. F Seed (0.5 mm.).

sprouting perpendicularly to the stem, leaves lanceolate, membranaceous, parallel nerves prominent, syncarps yellowish, nearly smooth on the surface.

(13) ***Freycinetia spinellosa*** KANEHIRA sp. nov. § *Oligostigma*. Fig. 12.

Ramulis teretibus, 4-7 cm. crassis, internodiis circ. 10 cm. longis; foliis coriaceis, imbricatis, $\pm$ erecto-ascendentibus, linearibus, usque ad 50 cm. longis, 0.8 cm. latis, sursum acuminatis, basi paullo angustatis, vaginantibus, utrinque longitudinaliter venoso-striatis, apice remotiuscule spinulosis, in parte media fere laevibus, basi supra auriculis denticulatis; auriculis late

Fig. 12. *Freycinetia spinellosa* KANEH.

A Branchlet with fruits $\times \frac{1}{2}$.	D Longitudinal section of the same $\times 2.5$.
B Basal part of leaf.	E Cross section of the same (magn.)
C Drupe $\times 2.5$.	F Seed (1 mm. long).

lanceolatis, 2.5 cm. longis, 4-5 mm. latis, margine pectinatis, membranaceo-scariosis, in fibras cito solutis. Infructescentiis terminalibus, syncarpiis 3, oblongis vel ovoideis, 3 cm. longis, $\pm$ 2 cm. diametro, pedunculatis, pedunculis seabridis, praecipue in angulis, baccis fusiformibus, 7 mm. longis, 1.5 cm. crassis, basi haud liberis, apice anguste pyramidatis, stigmatibus 1 vel interdum usque ad 4, annulo angusto cinctis, seminibus vix 1 mm. longis, raphe crassa, strophiole nullo.

No. 12052 KANEHIRA-HATUSIMA, Dallmann, March 1, 1940. No. 12507 (type) KANEHIRA-HATUSIMA, Sennen, Boemi River, March 7, 1940. No. 12791 KANEHIRA-HATUSIMA, Boemi-Prau, March 11, 1940. No. 13089 KANEHIRA-HATUSIMA, Momi, along the seashore, March 23, 1940.

The species is characterized by its very long slender leaves and broad lanceolate auricles with pectinate margin.

(To be continued).

金平・初島採集ニューギニア植物研究 I (和文摘要)

金 平 亮 三

は し が き

昭和 15 年私ハ蘭領ニューギニアニ植物ヲ採集スル機會ガ與ヘラレ初島住彦君ヲ帶同シ 1 月 18 日, 日本ヲ出發, 一路爪哇ニ渡リ同地ノ植物學者ニ面會シ文獻ヲ借覽, 且ツニューギニア探檢ノ援助ト便宜トヲ當路ノ人ニ依頼シタ。2 月 10 日スラバヤ出帆, 12 日セレベス島マカツサー着, ニューギニア行ノ便船ニ移乗, 2 月 20 日マヌコワリニ到着, 更ニナビレニ至リ南洋興發會社ノ假小屋ニ初メテ日本カラノ旅裝ヲ解キ採集ノ準備ヲシタ。

ニューギニアニ於ケル第 1 回ノ採集地ハナビレノ南方, 山奥凡 40 km. ダマル採集地ヲ中心トシタル地方トソノ往復ノ沿道森林地帯デアリ, 第 2 回ハマヌコワリノ南方ヘルフイंक灣ニ沿フ南洋興發ノモミ農場附近ノ森林地帯, 第 3 回ハモミノ西方, 海拔 2,000 m ノ地ニアルアング湖畔トソノ地ニ到ル往復沿道地帯デアツタ。コノアング湖ハ 1913 年 L. S. GIBBS 女史ガ採集シ, ソノ研究ノ結果, 名著 A contribution to the phytogeography and flora of the Arfak Mountains (1917) ガ出版セラレタ。當時ト今日トハソノ事情モ一變シテ居ルガ女史ハ 330 種ノ標本ヲ持ち歸リ上記ノ論文ニ 317 種 (うち 66 種ハ羊齒類以下) ヲ掲ゲ 4 新屬ト 100 ノ新種ヲ發表シタ。我々ノ今回ノ採集中, ソノ收獲ノ最モ多カツタノハ實ニコノアング地方デソノ採集點數ハ 860 デアリ, 1 新屬ノ外ニアング地帯ノ新記録屬 64, ニューギニア大陸ノ新記録屬 4 ヲ得タノデアツタ。

ニューギニア大陸ノフロラノ研究ハソノ日ガ淺ク蘭領側ハ 1907-1913 年ノ大探檢以外ニ見ルベキモノハナイ様ダガ、舊獨領側ハ前大戰ガ始マルマデ現地ノ調査ガ續ケラレタ。

我々ノ採集品ハ蘭印側トノ約束ニヨリ、ソノ一組ヲボ植物園ニ寄贈シ他ノ一組ハ交換用トシテアーノルド樹木園ニ送附スルノ豫定ニナツテキル。

日本デニューギニアノ植物ヲ研究スルニハ第一文獻ガ少イシ、又同地方ノ信賴ス可キ標本ガ殆ド無いノデ甚ダ困難ナ事情ニアル。前記蘭印ノ探檢報告トシテ有名ナ Nova Guinea スラ日本デハソノ完本ガ無い位デアルカラ他ハ推シテ知ル可シデアル。尤モ我國唯一ノ完本デ臺灣總督府調査課所管ニ屬シ目下ハ臺北南方協會ノ圖書室ニ所藏セラレテアルノヲ借用スルコトノ出來タノハ仕合セデアツタ。

ソノ他ノ文獻モ甚ダ尠イノデアルガ、今回ノ標本ニ手ヲ染メヌ譯ニ行カヌカラ出來ル限リ日本デ研究ヲナシ、ドウシテモ手ニオヘヌモノハ外國ニ依頼スル計畫ヲ立テ、取り敢ヘズ羊齒類ハ伊藤洋理學博士ニ、菊科ハ北村四郎博士ニ、蘭科ハ津山尙理學士ニ、又禾本科ト莎草科トハ大井次三郎博士ニソノ研究ヲ夫々依頼シタ次第デアル。

(I) タコノキ科

今回採集シタタコノキ科ハ *Freycinetia* 屬ハ 18 種、*Pandanus* 屬ハ 14-16 種デアツタ。タコノキ屬ハ先年猪熊農學士ノ採集品ガ私ニ提供セラレタノデ、私ハソノウチノ新種ト共ニニューギニア産タコノキヲ本誌ニ發表シタ。ソノ當時ハ 42 種、3 變種ガ知ラレテキタガソノ後メリル・ペリーニヨリ 8 新種ガ加ヘラレ 50 種トナツタ。コノウチ兩氏創定ノコタイプガ私ノ手元ニ送クラレタノデ鑑定上非常ニ役立つタ。ツルタコノキ屬ニツイテハ私ハ未ダニューギニア産ノ全部ヲ調査シテキナイガメリル・ペリーノ發表シタモノダケデ 44 種アリ、コノウチ 29 種ハ同兩氏ノ創定シタ新種デアル。

本科ノ標本ノ一部ハメリル博士ニ寄贈シタノデ、鑑定上前記兩氏ノ助言ト援助トヲ得タコトハ感謝ニタヘヌ所デアル。

又本研究ニ當リ文部省科學研究費ノ一部ガソノ支途ニ當テラレタルコトヲ茲ニ特記スル。

Freycinetia 屬

(1) *Freycinetia angustissima* RIDLEY ハ細イ莖ニ枝ガ澤山出ル、ブミ川ニ沿フ森林中樹木ニ絡マツテ居タ。メリルハ *F. polyclada* MERR. et PERRY トシタガ、後本種ノ異名ニ變更シタ。

(2) *Freycinetia Beccarii* SOLMS-LAUBACH ハ sterile ノ標本デアルガ細イ膜質ノ葉

Freycinetia angustissima.

デ長サ 3-4 cm. 幅 5-10 mm. **メリル**ノ來信ニヨルト本種ニ間違ハナイトイフ。

(3) *Freycinetia cruciger* KANEH. 大キナ樹幹ニイツモ密着シ根元カラ眞直グニ伸ビテキル, 外觀 *Araceae* ニ似テキル, 葉ハ淡イ灰綠色デ各節毎ニ根ヲ出シ葉ヲ十字形ニ密着スル, **グルマン**地方ニノミ澤山見タガ實ノアルモノハ只一ツダケデアツタ。*F. ellipsoidalis* MERR. et PERRY ニ似テキルガ本種ノ葉ハヨリ大デアリ特色ノアル種類デアル。

(4) *Freycinetia Holtrungii* WARB. 本種ハ**アーチボルド**探檢デ得タ標本ニツキ**メリル**ガ本種ニ同定シタ標本ト全く合致スル, 尤モ**メリル**ハWARBURGノ**タイプ**ト比較ノ上, 鑑定シタモノナリヤ否ヤ不明ナルモ, 目下ノ處**メリル**ノ鑑定ニ從フヨリ外ハナイ。

(5) *Freycinetia Inouei* KANEH. 一見 *F. Archboldiana* MERR. et PERRY ニ近イガ實ハヨリ大デ核果ハ細長ナルニヨリ容易ニ區別ガツク。

(6) *Freycinetia Klossii* RIDLEY **グルマン**地方ニ多ク, 澤山ナ標本ヲ得タ, 本種ノ鑑定ニハ間違ナイ, **ニューギニヤ**デハ相當廣ク分布スルモノラシイ。

(7) *Freycinetia lacinulata* KANEH. Auricle ガ節ノ處カラ房ノ様ニ分カレテ出テ居ル。*F. Brassii* MERR. et PERRY ニ近イガソノ**タイプ**ト比較スルト本種ノ葉ハヨリ細長デアリ實ハ黃熟スルノデ區別スル。

(8) *Freycinetia latiauriculata* KANEH. 廣イ auricle ヲ有スルノガ本種ノ特長デアル。

(9) *Freycinetia linearis* MERR. et PERRY 葉ノ基部ハ完全ナ鞘狀デ廣イ膜質ノ auricle ヲ有ツテキル, 特色アル種類デ高地帯ニ生ジ分布ハ廣イト見ヘル。**アンギ**湖畔 2,000 m. ノ所デ採集シタ。

(10) *Freycinetia oblanceolata* MARTELLI **グルマン**及**ビアンギ**デ採集シタ, 分布ノ廣キヲ思ハシメル, **メリル**カラ寄贈セラレタ標本トヨク一致スル。

(11) *Freycinetia platyphylla* KANEH. *F. tessellata* MERR. et PERRY ヲ思ハシメル種類デ, 葉ハソノ幅 7-8 cm. 實ハ大キナ圓筒形ヲナスニヨリ區別スル。

(12) *Freycinetia rectangularis* KANEH. 基ニ刺アリ, 枝ハ直角ニ出ル。

(13) *Freycinetia spinellosa* KANEH. Auricle ニ橢形ノ小刺ガアルノデ區別ガ出來ル。

(續ク)