

LIST OF ORCHIDACEAE COLLECTED IN 1937  
BY Dr C. G. G. J. VAN STEENIS IN ATJEH (NORTH SUMATRA).<sup>1)</sup>

by

J. J. S M I T H

(Oegstgeest).

(Issued April 15th, 1943).

**Platanthera angustata** (Bl.) Lndl., Gen. et sp. Orch. (1835), 290; etc.

**S u m a t r a:** Atjeh, Gajolanden, Poetjoek Angasan, bivouac 1 to 2, 2700 m, blang ground, marshy heath, common (*C. G. G. J. van Steenis n. 8350*, 28 Jan. 1937). G. Leuser, bivouac 4—5, watershed, 2700—2800 m (*C. G. G. J. van Steenis n. 8502*, 31 Jan. 1937). Same locality, central top, Aloer near bivouac 6, 3250—3300 m, mountain meadow (*C. G. G. J. van Steenis n. 8633*, 3 Febr. 1937). G. Goh Lemboeh, from bivouac Aer Poetih waterfall to bivouac Halfweg, 1000 m (*C. G. G. J. van Steenis n. 8902*, 8 Febr. 1937).

**Platanthera Blumei** Lndl., Gen. et sp. Orch. (1835), 290; etc.

**S u m a t r a:** Atjeh, Gajolanden, summit G. Kemiri to bivouac Aloer, on the east slope, 3300—2850 m, forest ridge and plateau (*C. G. G. J. van Steenis n. 9686*, 10 March 1937).

The material is in bud only, but the spur is clavate and blunt.

**Cryptostylis ?conspicua** J. J. S. in Bull. Jard. Bot. Buit. 3e sér. III (1921), 247; V (1922), t. 24, II.

**S u m a t r a:** Atjeh, Gajolanden, Goh Lemboeh, from bivouac Halfweg to bivouac Aer Poetih waterfall, 1600 m, forest ridge (*C. G. G. J. van Steenis n. 9202*, 24 Febr. 1937).

Not quite certain.

**Epipogium roseum** Lndl. in Journ. Linn. Soc. I (1857), 177; etc.

**S u m a t r a:** Atjeh, Gajolanden, from bivouac 3, on the confluence of K. Kapi and K. Aoenan to bivouac Paja, 1100—1250 m, flat forest ridges with cold sulphurous spring fields (*C. G. G. J. van Steenis n. 9987*, 21 March 1937). Foot of G. Kemiri, bivouac 1 via Goempang to Kongke, 900 m (*C. G. G. J. van Steenis, n. 9773*, 12 March 1937).

**Galeola Lindleyana** Rehb. f., Xenia Orch. II (1862), 78; etc.

**S u m a t r a:** Atjeh, Gajolanden, from Sanger, bivouac 2 to bivouac 3 on the confluence of K. Kapi and K. Aoenan, 1100 m, humid primeval forest (*C. G. G. J. van Steenis n. 9881*, 20 March 1937).

**Aphyllorchis ?pallida** Bl., Bijdr. (1825); Tab. fig. 77; etc.

**S u m a t r a:** Atjeh, Gajolanden, foot of G. Kemiri, bivouac 1 via Goempang to Kongke, 900 m (*C. G. G. J. van Steenis n. 9772*, 12 March 1937). From Sanger, bivouac 2 to bivouac 3 on the confluence of K. Kapi and K. Aoenan, 1100 m, flat forest ridges (*C. G. G. J. van Steenis n. 9908*, 20 March 1937). From bivouac 7 to West via Aer Panas to Roema Boender on the transport path near paal 66/67 and along the Lau Alas to G. Setan, 1000 m, humid forest slope (*C. G. G. J. van Steenis n. 10086*, 24 March 1937).

<sup>1)</sup> This paper was originally intended to be published in the Bulletin of the Government Botanic Garden, Buitenzorg, but the war prevented me from doing so and made me request the hospitality of "Blumea".

**Anoectochilus ?longicalcaratus** J. J. S. in Bull. Jard. Bot. Buit. 3e sér. V (1922), 18; Suppl. II (1930), t. 9, I.

**Sumatra:** Atjeh, Gajolanden, G. Kemiri, eastern slope, bivouac 1 to 2, 2850 m., forest ridge (*C. G. G. J. van Steenis n. 9559*, 6 March 1937). From bivouac Laoet Tiga Sagi (6) and Pasir Lebar to bivouac 7, 1300—1500 m., moss-grown forest (*C. G. G. J. van Steenis n. 10042*, 23 March 1937).

**Odontochilus sumatrana** J. J. S. in Blumea V<sup>2</sup> (1943), 298.

**Sumatra:** Atjeh, Gajolanden, from bivouac Laoet Tiga Sagi (6) and Pasir Lebar to bivouac 7, 1300—1500 m., moss-grown forest (*C. G. G. J. van Steenis n. 10043*, 23 March 1937).

**Myrmecis gracilis** Bl., Fl. Jav. n. ser. I Orch. (1858), 64, t. 21, fig. 2; etc.

**Sumatra:** Atjeh, Gajolanden, G. Kemiri, eastern slope, bivouac 1 to 2, 2500—2850 m., forest ridge, moss-grown forest, common (*C. G. G. J. van Steenis n. 9560*, 6 March 1937). Summit G. Kemiri to bivouac Aloer on the east side, 3300—2850 m., forest ridge and plateau in moss-cushions (*C. G. G. J. van Steenis n. 9703*, 10 March 1937).

**Hetaeria grandiflora** Ridl. in Journ. Mal. Br. R. As. Soc. I (1923), 98; etc.

**Sumatra:** Atjeh, Gajolanden, from bivouac Halfweg to bivouac Aer Poetih waterfall, 1000 m., forest ridge (*C. G. G. J. van Steenis n. 9198*, 24 Febr. 1937).

**Erythrodess latifolia** Bl., Bijdr. (1825), 411; Tab. fig. 72; etc.

**Sumatra:** Atjeh, Gajolanden, from bivouac 2, Sanger to bivouac 3 on the confluence of K. Kapi and K. Aoenan, 1100 m., flat forest ridges (*C. G. G. J. van Steenis n. 9901*, 20 March 1937).

**Dicerostylis lanceolata** Bl., Fl. Jav. n. ser. I (1858), 98, t. 38, fig. 1; etc.

**Sumatra:** Atjeh, Gajolanden, from bivouac Laoet Tiga Sagi (6) and Pasir Lebar to bivouac 7, 1300—1500 m., wet forest (*C. G. G. J. van Steenis n. 10040*, 23 March 1937).

**Goodyera ?viridiflora** Bl., Fl. Jav. n. ser. I, Orch. (1858), 34, t. 9, fig. 2; etc.

**Sumatra:** Atjeh, Gajolanden, from Sanger, bivouac 2 to bivouac 3 on the confluence of K. Kapi and K. Aoenan, 1100 m., flat forest ridges (*C. G. G. J. van Steenis n. 9909*, 20 March 1937).

Only a weak specimen with one flower.

**Goodyera secundiflora** Lndl. in Journ. Linn. Soc. I (1857), 182; etc.

**Sumatra:** Atjeh, Gajolanden, Poetjoek Angasan, forest slope above Penosan, 2000 m., ericoid ridge (*C. G. G. J. van Steenis n. 8814*, 27 Jan. 1937); Leuser complex, bivouac 2 to 3, Lau Alas upper course, 2100—2250 m., moss-grown forest (*C. G. G. J. van Steenis n. 8435*, 29 Jan. 1937; "leaf light green, mottled, flower white").

**Goodyera ?pusilla** Bl., Fl. Jav. n. ser. I, Orch. (1858), 31, t. 9 B, fig. 3; etc.

**Sumatra:** Atjeh, Gajolanden, from Palo to Kongke, 1000 m., open forest (*C. G. G. J. van Steenis n. 9432*, 4 March 1937).

**Tropidia angulosa** Bl., Orch. Arch. Ind., 122; etc.

**Sumatra:** Atjeh, Gajolanden, from Pendeng to bivouac Aer Poetih waterfall, 500 m., humid primeval forest (*C. G. G. J. van Steenis n. 8875*, 17 Febr. 1937; "flower white"). Bivouac Aer Poetih waterfall to Pendeng, 400—500 m., primeval forest (*C. G. G. J. van Steenis n. 9300*, 25 Febr. 1937; "flower white").

**Tropidia pedunculata** Bl., Fl. Jav. nov. ser. I, Orch. (1858), 103; t. 40; etc.

**Sumatra:** Atjeh, Gajolanden, Goh Lemboeh, from bivouac Aer Poetih waterfall to bivouac Halfweg, 1400 m (*C. G. G. J. van Steenis n. 8926*, 18 Febr. 1937; "flower light orange"). Same locality, 1000 m., forest ridge (*C. G. G. J. van Steenis n. 9817*, 24 Febr. 1937; "flower white").

**Nephelaphyllum pulchrum** Bl., Bijdr. (1825), 373; Tab. fig. 22; etc.

**Sumatra:** Atjeh, Gajolanden, G. Goh Lemboeh, from bivouac Aer Poetih waterfall to bivouac Halfweg, 1000 m, forest ridge (*C. G. G. J. van Steenis n. 8895*, 18 Febr. 1937; "flower pale, leaf mottled").

**Tainia** (sect. *Ascotainia*) **Steenisii** J. J. S. in Blumea V<sup>2</sup> (1943), 306.

**Sumatra:** Atjeh, Gajolanden, G. Goh Lemboeh, from bivouac Aer Poetih waterfall to bivouac Halfweg, 1400 m, forest ridge (*C. G. G. J. van Steenis n. 8960*, 18 Febr. 1937).

**Tainia sumatrana** J. J. S. in Bull. Jard. Bot. Buit. 3e sér. V (1922), 24; Suppl. II (1930), t. 22, IV.

**Sumatra:** Atjeh, Gajolanden, Goh Lemboeh, from bivouac Halfweg to bivouac Aer Poetih waterfall, 1200 m, forest ridge (*C. G. G. J. van Steenis n. 9216*, 24 Febr. 1937).

**Coelogyne salmonicolor** Rchb. f. in Gard. Chr. n. s. XX (1883), 328; etc.

**Sumatra:** Atjeh, Gajolanden, from bivouac 3 on the confluence of K. Kapi and K. Aoenan to bivouac Paja, 1100—1250 m, flat forest ridges with cold sulphurous spring fields (*C. G. G. J. van Steenis n. 9930*, 21 March 1937).

**Coelogyne** (sect. *Cristatae*) **kemiriensis** J. J. S. in Blumea V<sup>2</sup> (1943), 298.

**Sumatra:** Atjeh, Gajolanden, summit Goh Lemboeh, 3000 m, moss-grown forest (*C. G. G. J. van Steenis n. 9054*, 20 Febr. 1937; "flower white with a brown stain in throat"). G. Kemiri, eastern slope, bivouac 2 to summit, 2900—3314 m, forest ridge and plateau (*C. G. G. J. van Steenis n. 9636*, 7 March 1937; "flower white with some brown markings on the keels of the lip, terrestrial Orchid").

**Pholidota** (sect. *Crinonia*) **rupestris** J. J. S. in Blumea V<sup>2</sup> (1943), 300.

**Sumatra:** Atjeh, Gajolanden, G. Leuser, central top, bivouac 6, 3300—3500 m, stony spots and rocks on the top (*C. G. G. J. van Steenis nrs. 8578* and *8579*, 2 Febr. 1937).

**Dendrochilum simile** Bl., Bijdr. (1825), 400; Tab. fig. 51; etc.

**Sumatra:** Atjeh, Gajolanden, Poetjoek Angasan, forest slope above Penosan, 1500 m, ridge, mountain forest (*C. G. G. J. van Steenis n. 8279*, 27 Febr. 1937).

**Dendrochilum longibracteatum** Pfitz. in Pflanzrenr. IV. 50. II. B. 7 (1907), 106, fig. 35 M.

**Sumatra:** Atjeh, Gajolanden, Leuser complex, bivouac 3 to 4, great watershed, 2250—2750 m, blang grounds (*C. G. G. J. van Steenis n. 8466*, 30 Jan. 1937).

**Dendrochilum** (sect. *Platyclinis*) **rhombbeum** J. J. S. in Blumea V<sup>2</sup> (1943), 304.

**Sumatra:** Atjeh, Gajolanden, Poetjoek Angasan, forest slope above Penosan, 1500 m, forest ridge (*C. G. G. J. van Steenis n. 8820*, 27 Jan. 1937).

**Dendrochilum** (sect. *Platyclinis*) **quinquangulare** J. J. S. in Blumea V<sup>2</sup> (1943), 305.

**Sumatra:** Atjeh, Gajolanden, G. Leuser, 2700—2800 m, watershed, bivouac 4 to 5, brook valley (*C. G. G. J. van Steenis n. 8492*, 31 Jan. 1937). Central top, bivouac 6, 3300—3500 m, rocks of the top (*C. G. G. J. van Steenis n. 8580*, 2 Febr. 1937). Summit Goh Lemboeh, 3000 m, blang, on rocks (*C. G. G. J. van Steenis n. 9080*, 21—22 Febr. 1937).

**Dendrochilum** (sect. *Platyclinis*) **atjehense** J. J. S. in Blumea V<sup>2</sup> (1943), 302.

**Sumatra:** Atjeh, Gajolanden, G. Leuser, bivouac 4—5, 2700—2800 m, watershed (*C. G. G. J. van Steenis n. 8540*, 31 Jan. 1937).

**Dendrochilum** (sect. *Platyclinis*) **fimbrilobum** J. J. S. in Blumea V<sup>2</sup> (1943), 303.

**Sumatra:** Atjeh, Gajolanden, from summit Goh Lemboeh to bivouac Halfweg, 2400 m, forest ridge (*C. G. G. J. van Steenis n. 9159*, 23 Febr. 1937).

**Dilochia Cantleyi** Ridl. in Journ. Linn. Soc. XXXII (1896), 332; etc.

**Sumatra:** Atjeh, Gajolanden, from top Goh Lemboeh to bivouac Halfweg, 2100 m, forest ridge (*C. G. G. J. van Steenis n. 9165*, 23 Febr. 1937; "flower cream-colour, lip brimstone-yellow, faintly striped dirty violet").

**Arundina speciosa** Bl., Bijdr. (1825), 401; Tab. fig. 73; etc.

**Sumatra:** Atjeh, Gajolanden, from bivouac 9 on the Lau Alas via the Agoesan ridge to Blang Kedjeren, 2000 m, grassy slope on burnt ridge, common (*C. G. G. J. van Steenis n. 8736*, 8 Febr. 1937).

**Sarcostoma ?javanica** Bl., Bijdr. (1825), 340; Tab. fig. 45; etc.

**Sumatra:** Atjeh, Gajolanden, from bivouac 9 via the Agoesan ridge to Blang Kedjeren, 2600 m, G. Senoebong (*C. G. G. J. van Steenis n. 8751*, 7 Febr. 1937).

**Ceratostylis grandiflora** J. J. S. in Rec. trav. bot. Néerl. I (1904), 156, cum fig.

**Sumatra:** Atjeh, Gajolanden, Leuser complex, bivouac 2 to 3, Lau Alas upper course, 2100—2250 m, moss-grown forest (*C. G. G. J. van Steenis n. 8493*, 29 Jan. 1937).

**Ceratostylis (sect. Pleuranthemum) Steenisii** J. J. S. in Blumea V<sup>2</sup> (1943), 307.

**Sumatra:** Atjeh, Gajolanden, G. Kemiri, east side, from bivouac Aloer to bivouac 1, 2800—3000 m, moss-grown forest on the ridge (*C. G. G. J. van Steenis n. 9742*, 11 March 1937; "flower white").

var. *latipetala* J. J. S. in Blumea V<sup>2</sup> (1943), 308.

**Sumatra:** Atjeh, Gajolanden, summit Goh Lemboeh, 3000 m (*C. G. G. J. van Steenis n. 9077*, 20 Febr. 1937; "flower white").

**Ceratostylis ?ampullacea** Krzl. in Bot. Jahrb. XVII (1893), 487; etc.

**Sumatra:** Atjeh, Gajolanden, from summit Goh Lemboeh to bivouac Halfweg, 1850 m, on stump in low coppice (*C. G. G. J. van Steenis n. 9141*, 23 Febr. 1937).

**Podochilus tenuis** Lndl., Gen. et sp. Orch. (1833), 235; etc.

**Sumatra:** Atjeh, Gajolanden, from bivouac 7 to the west via Aer Panas to Roema Boender, on the trail near paal 66/67, and along the Lau Alas to G. Setan, humid forest slope (*C. G. G. J. van Steenis n. 10101*, 24 March 1937; "flower white").

**Appendicula pendula** Bl. ?var. *obtusa* J. J. S. in Bull. Jard. Bot. Buit. 2e ser. XIV (1914), 40.

**Sumatra:** Atjeh, Gajolanden, from bivouac Paja (5) to bivouac Meer (6), 1250—1500 m, forest (*C. G. G. J. van Steenis n. 10009*, 22 March 1937).

**Calanthe angustifolia** Lndl., Gen. et sp. Orch. (1833), 251; etc.

**Sumatra:** Atjeh, Gajolanden, G. Kemiri, east side, from bivouac Aloer to bivouac 1, 2000 m, forest ridge (*C. G. G. J. van Steenis n. 9754*, 11 March 1937; "flower white, midlobe lip golden-yellow").

**Calanthe (sect. Styloglottis) atjehensis** J. J. S. in Blumea V<sup>2</sup> (1943), 308.

**Sumatra:** Atjeh, Gajolanden, from bivouac Laoet Tiga Sagi (6) and Pasir Lebar to bivouac 7, 1300—1500 m, narrow ridge, moss-grown forest (*C. G. G. J. van Steenis n. 10057*, 23 March 1937; "flower orange, very beautiful plant").

**Phaius flavus** Lndl., Gen. et sp. Orch. (1831), 128; etc.

**Sumatra:** Atjeh, Gajolanden, Poetjoek Angasan, forest slope above Penosan, 1500—2000 m (*C. G. G. J. van Steenis nrs. 8266* and *8303*, 27 Jan. 1937; "flower white").

**Spathoglottis plicata** Bl., Bijdr. (1825), 401; Tab. fig. 76; etc.

**Sumatra:** Atjeh, Gajolanden, from Kongke via Goempang to bivouac 1 on east slope of G. Kemiri, 1200 m, sand and gravel bank, very steep (*C. G. G. J. van Steenis n. 9515*, 5 March 1937).

**Spathoglottis aurea** Lndl. in Paxt., Fl. Gard. I (1850), 16; etc.

**Sumatra:** Atjeh, Gajolanden, from bivouac 3 on the confluence of K. Kapi and K. Aoenan to bivouac Paja, 1100—1250 m, flat forest ridges with sulphurous spring fields, swamp Paja Kapi (*C. G. G. J. van Steenis n. 9943*, 21 March 1937; "flower golden yellow").

**Eria ?robusta** Lndl., Gen. et sp. Orch. (1830), 69; etc.

**Sumatra:** Atjeh, Gajolanden, from bivouac 3 on the confluence of K. Kapi and K. Aoenan to bivouac Paja, 1100—1250 m, flat forest ridges, mountain swamp Paja Kapi (*C. G. G. J. van Steenis n. 9965*, 21 March 1937).

**var. pilosipetala** J. J. S. in Bull. Jard. Bot. Buit. 3e sér. XII (1932), 124.

**Sumatra:** Atjeh, Gajolanden, G. Leuser, bivouac 4 to 5, watershed, 2700—2800 m, open rocky plains in mountain heath (blang) (*C. G. G. J. van Steenis n. 8507* 31 Jan. 1937; "flower rose colour"). From bivouac Halfweg to bivouac summit Goh Lemboeh, 2800 m, forest ridge, moss-grown forest (*C. G. G. J. van Steenis n. 8981*, 17 Febr. 1937; "flower inside light green, outside light brown, column blackish red").

**Eria appendiculata** Lndl., Gen. et sp. Orch. (1830), 69; etc.

**Sumatra:** Atjeh, Gajoelanden, from bivouac Paja (5) to bivouac Meer (6), 1250—1500 m, forest (*C. G. G. J. van Steenis n. 10011*, 22 March 1937).

**Eria pachystachya** Lndl. in Journ. Linn. Soc. III (1859), 60; etc.

**Sumatra:** Atjeh, Gajoelanden, from bivouac Laoet Tiga Sagi (6) and Pasir Lebar to bivouac 7, 1300—1500 m, edge of the lake, epiphytical (*C. G. G. J. van Steenis n. 10048*, 23 March 1937; "flower rose colour").

**Eria ?palmifolia** Ridl. in Journ. Fed. Mal. St. Mus. VIII (1917), 99; etc.

**Sumatra:** Atjeh, Gajoelanden, G. Leuser, watershed, 2700—2800 m, moss-grown forest (*C. G. G. J. van Steenis n. 8588*, 31 Jan. 1937; "flower rose colour"). From bivouac Halfweg to bivouac summit Goh Lemboeh, forest ridge, moss-grown forest (*C. G. G. J. van Steenis n. 8982*, 17 Febr. 1937; "flower rose-coloured, column wine-red").

**Eria schistoloba** Schltr. in Bot. Jahrb. XLV (1911), Beibl. No. 104, 38; etc.

**Sumatra:** Atjeh, Gajolanden, from bivouac Laoet Tiga Sagi (6) and Pasir Lebar to bivouac 7, 1300—1500 m, edge of lake (*C. G. G. J. van Steenis n. 10049*, 23 March 1937; "flower yellow").

**Eria rhinoceros** Ridl. in Journ. Fed. Mal. St. Mus. VIII (1917) 99; etc.

**Sumatra:** Atjeh, Gajolanden, Poetjoek Angasan, forest slope above Penosan, 2000 m, ericoid ridge on stumps frequently (*C. G. G. J. van Steenis n. 8307*, 27 Jan. 1937; "flower white"). Leuser complex, bivouac 3 to 4, great watershed, 2250—2750 m, blang grounds on rocks (*C. G. G. J. van Steenis n. 8467*, 30 Jan. 1937).

The leaves are much narrower than in other localities in Sumatra, perhaps due to the barren situation.

**Eria pilifera** Ridl. in Journ. Linn. Soc. XXXII (1896), 299; etc.

**Sumatra:** Atjeh, Gajolanden, from Paloh to Kongke, 1000 m (*C. G. G. J. van Steenis n. 9481*, 4 March 1937).

**Eria ferox** Bl., Mus. II (1856), 184; etc.

**Sumatra:** Atjeh, Gajolanden, from bivouac 9 on the Lau Alas via the Agoesan ridge to Blang Kedjeren, forest slope, 2000 m (*C. G. G. J. van Steenis n. 8737*, 8 Febr. 1937).

**Eria velutina** Lodd. ex Lndl. in Bot. Reg. XXVI (1840), Misc. 86; etc.

**Sumatra:** Atjeh, Gajolanden, Goh Lemboeh, from bivouac Halfweg to bivouac Aer Poeth waterfall, 1000 m, forest ridge (*C. G. G. J. van Steenis n. 9248*, 24 Febr. 1937).

**Eria poculata** Ridl. in Journ. Linn. Soc. XXXII (1896), 305; etc.

**Sumatra:** Atjeh, Gajolanden, G. Goh Lemboeh, from bivouac Aer Poeth waterfall to bivouac Halfweg, 1500 m, forest ridge, epiphytical (*C. G. G. J. van Steenis n. 8900*, 18 Febr. 1937).

**Dendrobium Wickersii** Schltr. in Fedde Rep. VIII (1910), 506; etc.

**Sumatra:** Atjeh, Gajolanden, from summit Goh Lemboeh to bivouac Halfweg, 2000 m, forest ridge (*C. G. G. J. van Steenis n. 9164*, 23 Febr. 1937). From bivouac 3 on the confluence of K. Kapi and K. Aoenan to bivouac Paja, 1100—1250 m, flat forest ridges with cold sulphurous spring fields, Paja Kapi swamp (*C. G. G. J. van Steenis n. 9940*, 21 March 1937).

**Dendrobium brevibulbum** J. J. S. in Bull. Jard. Bot. Buit. 3e sér. X (1928), 62; etc.

**Sumatra:** Atjeh, Gajolanden, Poetjoek Angasan, bivouac 1 to 2, 2300—2700 m, on trees, shrubs and rocks, common (*C. G. G. J. van Steenis n. 8344*, 28 Jan. 1937). G. Leuser, central top, bivouac 6, 3300—3500 m, on stony spots, rocks, also in moss-grown forest, but there commonly stronger (*C. G. G. J. van Steenis n. 8582*, 2 Febr. 1937). From bivouac Halfweg to bivouac summit Goh Lemboeh, 2000—3040 m, forest ridge, epiphytical and on rocks, common (*C. G. G. J. van Steenis nrs. 9026* and *9161*, 19 and 23 Febr. 1937). Goh Lemboeh, from bivouac Halfweg to bivouac Aer Poetih waterfall, 1400 m, forest ridge (*C. G. G. J. van Steenis n. 9234*, 24 Febr. 1937). G. Kemiri, east slope, bivouac 2 to summit, 2900—3314 m, forest ridge and plateau, on rocks (*C. G. G. J. van Steenis n. 9616*, 7 March 1937).

**Dendrobium pedicellatum** J. J. S. in Bull. Dép. Agric. Ind. Néerl. XV (1908), 13; etc.

**Sumatra:** Atjeh, Gajolanden, from bivouac 9 on the Lau Alas via the Agoesan ridge to Blang Kedjeren, 2000 m, mountain ridge (*C. G. G. J. van Steenis n. 8762*, 8 Febr. 1937). From summit Goh Lemboeh to bivouac Halfweg, 2000 m, forest ridge (*C. G. G. J. van Steenis n. 9166*, 23 Febr. 1937; "flower white, lip leather-yellow with a white tip").

**Dendrobium Hasseltii** Lndl., Gen. et sp. Orch. (1830), 81; etc.

**Sumatra:** Atjeh, Gajolanden, Poetjoek Angasan, bivouac 1 to 2, 2300—2700 m, in shrubs on ridge, common but scattered (*C. G. G. J. van Steenis n. 8342*, 28 Jan. 1937). G. Leuser, bivouac 4 to 5, watershed, 2700—2800 m, on the blang, also in moss-grown forest (*C. G. G. J. van Steenis n. 8500*, 31 Jan. 1937; "flower purple with an orange spot on the lip"). G. Kemiri, east slope, bivouac 1 to 2, 1800—2500 m; forest ridge (*C. G. G. J. van Steenis n. 9535*, 6 March 1937).

**Bulbophyllum membranifolium** Hook. f. Fl. Br. Ind. V (1890), 706; Ic. pl. XXI (1892), t. 2034; etc.

**Sumatra:** Atjeh, Gajolanden, from bivouac Halfweg to bivouac Goh Lemboeh, 2700 m, moss-grown forest, epiphytical, not rare (*C. G. G. J. van Steenis n. 9027*, 19 Febr. 1937; "flower brimstone-yellow with brown-red streaks").

**Bulbophyllum uniflorum** Hassk., Cat. Bog. (1844), 39; etc.

**Sumatra:** Atjeh, Gajolanden, from bivouac Halfweg to bivouac Goh Lemboeh, 2700 m (*C. G. G. J. van Steenis*, mixed with *n. 9027*, 19 Febr. 1937).

**Bulbophyllum lasianthum** Lndl. in Gard. Chr. 1855, 53; etc.

**Sumatra:** Atjeh, Gajolanden, Goh Lemboeh, from bivouac Halfweg to bivouac Aer Poetih waterfall, 1200 m, forest ridge (*C. G. G. J. van Steenis n. 9241*, 24 Febr. 1937).

**Bulbophyllum laxiflorum** Lndl., Gen. et sp. Orch. (1830), 57; etc.

**Sumatra:** Atjeh, Gajolanden, from bivouac Paja (5) to bivouac Meer (6), 1250—1500 m (*C. G. G. J. van Steenis n. 10008*, 22 March 1937).

**Bulbophyllum croceum** Lndl., Gen. et sp. Orch. (1830), 57; etc.

**Sumatra:** Atjeh, Gajolanden, from bivouac 9 on the Lau Alas via the Agoesan ridge to Blang Kedjeren, 1800—2000 m, abundant in coppice on mountain ridge (*C. G. G. J. van Steenis n. 8764*, 8 Febr. 1937; "flower brimstone-yellow").

Very strong specimens.

**Bulbophyllum** (sect. *Aphanobulbon*) **gajoense** J. J. S. in Blumea V<sup>2</sup> (1943), 309.

**Sumatra:** Atjeh, Gajolanden, from summit Goh Lemboeh to bivouac Halfweg, 2200 m, forest ridge (*C. G. G. J. van Steenis n. 9160*, 23 Febr. 1937; "flower light yellow"). Leuser complex, great watershed, 2250—2750 m, epiphytical in coppice (*C. G. G. J. van Steenis n. 8483*, 30 Jan. 1937).

**Bulbophyllum auroreum** J. J. S. var. **grandiflorum** J. J. S. in Bull. Jard. Bot. Buit. 3e sér. XII (1932), 143.

**Sumatra:** Atjeh, Gajolanden, Leuser complex, bivouac 2 to 3, Lau Alas upper course, 2100—2250 m, moss-grown forest (*C. G. G. J. van Steenis n. 8482*, 29 Jan. 1937; "flower leather-yellow with orange lip"). From bivouac Halfweg to bivouac Goh Lem-

boeh, 2500 m, moss-grown forest, forest ridge (*C. G. G. J. van Steenis n. 8979*, 19 Febr. 1937; "inflorescence pale orange, lip orange").

*Cymbidium chloranthum* Lndl. in Bot. Reg. XXIX (1843), Misc. p. 68; etc.

*Sumatra*: Atjeh, Gajolanden, Leuser complex, bivouac 2 to 3, Lau Alas upper course, 2100—2250 m, mountain heath (blang), on the ground, frequent, beautiful plant (*C. G. G. J. van Steenis n. 8424*, 29 Jan. 1937).

*Thelasis micrantha* J. J. S. in Fl. Buit. VI (1905), 495; Fig. Atl. fig. CCCLXXIV; etc.

*Sumatra*: Atjeh, Gajolanden, Goh Lemboeh, from bivouac Halfweg to bivouac Aer Poeth waterfall, 1000 m, forest ridge (*C. G. G. J. van Steenis n. 9214*, 24 Febr. 1937).

*Thelasis obtusa* Bl. Bijdr. (1825), 386; etc.

*Sumatra*: Atjeh, Gajolanden, from bivouac Paja (5) to bivouac Meer (6), 1250—1500 m, forest (*C. G. G. J. van Steenis n. 10010*, 22 March 1937).

*Phalaenopsis pulcherrima* J. J. S. in Fedde, Rep. XXXII (1933), 366; etc.

*Sumatra*: Atjeh, Gajolanden, Gadjah via Oreng to Pendeng, 1000—1400 m, very characteristic for grass-plots in open fir woods, numerous, terrestrial Orchid (*C. G. G. J. van Steenis nrs. 8820* and *9332*, 16 and 26 Febr. 1937; "flower rose colour with markings").

The following numbers could not be determined on account of the insufficient material.

- 8407 — *Bulbophyllum* spec. (sect. *Aphanobulbon*). Poetjoek Angasan, 2400—2700 m. Probably = *n. 9163* = 9753.
- 8438 — *Dendrobium* spec. (sect. *Rhopalanthe*). Leuser complex, upper course Lau Alas, 2100—2250 m.
- 8705 — *Bulbophyllum* ♀ n. sp. (sect. *Aphanobulbon*). From bivouac 8 to 9 on the Lau Alas, 2400 m.
- 8732 — *Dendrochilum* spec. (sect. *Monochlamys*). From bivouac 8 to 9 on the Lau Alas, 2000 m, common.
- 8751 — (mixed with) *Taeniophyllum* spec.
- 8761 — *Paphiopedilum* ♀ n. sp. From bivouac 9 on the Lau Alas via the Agoesan ridge to Blang Kedjeren, above Kongke, 1100 m.
- 8771 — *Lecanorchis* spec. From bivouac 9 on the Lau Alas via the Agoesan ridge to Blang Kedjeren, 1500 m.
- 8781 — *Calanthe* n. sp. (sect. *Eucalanthe*). From bivouac 9 on the Lau Alas via the Agoesan ridge to Blang Kedjeren, 2000 m.
- 8839 — *Plocoglottis* spec. Gadjah via Oreng to Pendeng, 600 m.
- 8905 — *Anoectochilus* spec. G. Goh Lemboeh, from bivouac Aer Poeth waterfall to bivouac Halfweg, 1500 m.
- 8946 — *Dendrobium* spec. (sect. *Oxystophyllum*). G. Goh Lemboeh, from bivouac Aer Poeth waterfall to bivouac Halfweg, 1500 m.
- 9142 — *Ceratostylis* spec. (sect. *Junoorchis*). From the summit Goh Lemboeh to bivouac Halfweg, 2500 m.
- 9157 — *Bulbophyllum* spec. From summit Goh Lemboeh to bivouac Halfweg, 2400 m.
- 9162 — *Bulbophyllum* spec. (sect. *Monilibulbus*). From summit Goh Lemboeh to bivouac Halfweg, 2200 m.
- 9163 — *Bulbophyllum* spec. (sect. *Aphanobulbon*). From the summit Goh Lemboeh to bivouac Halfweg, 3000—1850 m. Probably = *n. 8407* = 9753.
- 9388 — ♀ *Microstylis* spec. From Gadjah to Blang Kedjeren, 1450 m.
- 9490 — *Aphyllorchis* spec. From Kongke to Paloh, 1100 m = 9814.
- 9701 — *Liparis* (sect. *Rhachidibulbon*). Summit G. Kemiri to bivouac Aloer 3300—2850 m.
- 9746 — *Apostasia* spec. G. Kemiri, east side, from bivouac Aloer to bivouac 1, 1800 m.
- 9753 — *Bulbophyllum* spec. (sect. *Aphanobulbon*). G. Kemiri, east side, from bivouac Aloer to bivouac 1, 2000 m.

- 9814 — *Aphyllorchis* spec. From Kongke to Paloh, 1100 m = 9430.  
9865 — *Bulbophyllum* spec. (sect. *Aphanobulbon*). Sanger valley to bivouac 2, above Blang Kedjeren, 1050—1150 m.  
9883 — *Dendrochilum* spec. (sect. *Eudendrochilum*). From Sanger bivouac 2 to bivouac 3 on the confluence of K. Kapi and K. Aoenan, 1100 m.  
9941 — *Dendrochilum* spec. (sect. *Eudendrochilum*). From bivouac 3 on the confluence of K. Kapi and K. Aoenan to bivouac Paja, swamp Paja Kapi, 1100—1250 m.  
9951 — *Thrixspermum* spec. (sect. *Orsidice*). From bivouac 3 on the confluence of K. Kapi to bivouac Paja, swamp Paja Kapi, 1100—1250 m.  
9989 — *Calanthe* spec. (sect. *Eucalanthe*). From bivouac 3 on the confluence of K. Kapi and K. Aoenan to bivouac Paja, 1100—1250 m.  
10012 — *Microsaccus* spec. From bivouac Paja (5) to bivouac Meer (6), 1250—1500 m.  
10022 — *Vrydagzynea* ?n. sp. From bivouac Paja (5) to bivouac Meer (6), 1250—1500 m.