New Malay Orchids.

By H. N. Ridley.

The following new orchids mostly from the peninsula have been obtained since the publication of the Orchids of the Malay Peninsula in the Journal of the Linnean Society Vol. XXXII, p. 213.

In working up the group for the Flora of the Malay Peninsula I find we have as at present known 530 species belonging to 87 genera, and doubtless there are many more to be discovered especially in the northern districts, and on the hills of the east of the Peninsula. I have added a few descriptions of new species also from Sumatra, the orchid flora of which is really very little known, though the more showy kinds have been exported thence for many years.

*Liparis atrosanguinea*, n. sp. Stem stout sheathed 4 inches long, leaves ovate lanceolate acute crisped 8 inches long by three inches wide or less, scape stout over a foot tall. Raceme lax many flowered. Bracts very small ovate lanceolate, ovary and pedicel 1 inch long twisted, and the ovary with sinuate ribs. Flowers as large as those of *L. venosa* entirely deep red purple. Sepals linear obtuse revolute. Petals much narrower. Lip orbicular oblong ½ inch long subacute denticulate with two short semicircular lamellae at the base. Column arched with narrow wings.

Perak on the Gap on the Thaiping hills at 4000 feet elevation, (Curtis and Derry.)

Allied to *L. venosa*, Ridl., but with a broader lip and deep purple flower. A really beautiful plant.

*L. vittata*, n. sp. Pseudobulbs conic crowded short 1 inch long. Leaf lanceolate acute 5 inches long ¾ inch wide. Scape 6 inches long. Flowers numerous ¼ inch across. Sepals lanceolate, petals linear all white. Lip entire,
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oblong obtuse white with a central crimson bar. No calli. Ovary and pedicel \( \frac{1}{4} \) inch long. Column straight, broadened at the base.

Sumatra, Indragiri (Curtis). Flowered in Penang Gardens.

A pretty little plant of the *Coriifoliae* section, somewhat resembling *L. lacerata* Ridl., inhabit, but the lip is quite entire, and very differently colored.

*Platyclinis odorata*, n. sp. Pseudobulbs cylindric tapering \( 2\frac{1}{2} \) to 3 inches long leaf lanceolate subacute peltolate blade 9 inches long \( \frac{3}{4} \) inches wide, petiole 2 inches long slender. Raceme nodding graceful one foot long, lower half nude slender. Flowers greenish white sweet-scented \( \frac{1}{4} \) inch long numerous bracts lanceolate, acuminate longer than the shorter ovary, Sepals and petals lanceolate acuminate acute. Lip entire tongue-shaped obtuse minutely pubescent keels 2 nearly the whole length of the lip. Column rather short with broad wings, arms free from a little below the stigma as long as the hood linear apex soothed, hood of columns large toothed anther with a short broad beak.

Perak (Curtis, No. 2854).

*Dendrobium viridicatum*, n. sp. Stem rather slender flexuous over a foot long. Leaves lanceolate acute 2\( \frac{1}{2} \) inches long, \( \frac{1}{2} \) inch wide sheaths \( \frac{1}{2} \) inch long. Flowers borne on leafless stems numerous in very short racemes of 2 or 3 flowers, peduncles \( \frac{1}{2} \) inch long, bracts very small, ovate sheathing, pedicels \( \frac{3}{4} \) inch long. Flowers \( \frac{1}{2} \) inch long light green. Sepals lanceolate acute, laterals broader, mentum very short blunt. Petals broader oblong lanceolate. Lip entire lanceolate acute column short with erect arms.

Perak, at Ipoh (C. Goldham.)

This seems as nearly allied to *D. macrostachyum*, Lindl., as to any other species.

*D. Calicopis*, n sp. Stems slender over a foot long internodes \( \frac{1}{2} \) to 1 inch long. Leaves lanceolate acuminate acute,
3 inches long ½ inch wide. Flowers three or four on a short peduncle ½ inch long, pedicels with ovary ¼ inch long, flowers an inch across. Sepals ovate obtuse, laterals narrower subacute, mentum as long cylindric subacute. Petals broader elliptic obtuse, all white tinted with rose, lip entire broadly oblong truncate apex bilobed, lobes short rounded, with 4 raised veins in the centre two thick in the centre and two thinner outside all white with a rosy spot on the tip. Column short and thick enlarged at the stigma arms erect both like crimson. Anther ovate pink large.

Lankawi Islands, (Curtis).

This belongs to the Pedilonum section and is allied to D. hymenopterum, Hook. fil. which grows in Kedah. The flowers though few and rather fugacious, are very pretty the deep crimson of the tip of the column, contrasting well with the rosy white of the rest of the flower.

D. tenuicaule, n. sp. Stems very slender weak, a foot long. Leaves narrow linear lanceolate acuminate 3 inches long ¼ inch wide, sheaths one inch long. Flower solitary large, pedicel and ovary slender ½ inch long. Upper sepal ovate acute, mentum very long cylindric apex decurved acute ¼ inch long. Petals broadly ovate all pink darkest at the tips. Whole flower ¾ inch across. Lip claw very long narrow lateral lobes broad up curved, mid lobe short ovate apex bifid, edge crisped, white with a central pink line. Column short with a very long foot, arms toothlike erect. Anther margin pubescent.

Lankawi, Ayer Hangat (Curtis).

D. bijidum, n. sp. Plant with the habit of D. flabellum. stems a foot or more long slender, pseudobulbs oblanceolate flattened 1½ inch long, 2 inches apart. Leaf broadly lanceolate ovate obtuse 5 inches long 2 inches wide. Bracts lanceolate acute red. Flowers 1 or 2 open at a time, ovary and pedicel ½ inch long. Sepals and petals linear oblong acute recurved yellow with red spots, petals a little smaller, mentum acute. Lip longer than
the sepals, claw narrow linear edges and ridges crenulate, apex with two narrow cuneate truncate labels half as long as the claw, white yellowish at the tip column stout conic, as long as the foot. Anther oblong-truncate in front.

Lankawi Islands (Curtis).

One of the Desmotrichum section resembling D. flabel-lum but remarkable for the terminal lobe of the lip formed of two narrow cuneate truncate lobes.

Bulbophyllum variabile, n. sp. Rhizome stout woody, pseudobulbs curved 3 inches long. Leaf elliptic ovate acute 6 inches long, 2 to 3 inches wide, thin by coriaceous, petiole an inch long. Scape from near the pseudobulb stout, red with several sheaths at the base and three or four lanceolate red spotted ones scattered on it. Bracts large lanceolate acute spotted red half as long as the ovary. Flowers 1 or 2 large show 3 inches across. Upper sepal lanceolate acute, laterals falcate. Petals lanceolate nearly as long all yellow with red dots. Lip tongue-shaped recurved with a broader base, short, apex blunt yellow with red spots. Column short, foot twice as long, apex free, arms short rounded.


Thaiping Hills on trees and rocks; collected by Mr. Curtis and myself; and at Gunong Batu Putih, by Wray, 1122.

There are two colour forms of this, one as described above, the other has the sepals and petals crimson, with red spots at the base; lip dark crimson, column yellow with crimson spots. Both forms are very beautiful and attractive plants, but like so many of these large Bulbophyllum very troublesome to grow.

B. pustulatum, n. sp. Stem stout crinite, pseudobulbs crowded oblong conic half an inch long. Leaf elliptic lanceolate acute four inches long by one inch wide, petiole \( \frac{1}{2} \) inch long. Flower solitary an inch across, pedicel slender \( \frac{1}{2} \) an
inch long. Upper sepal lanceolate acute, laterals much broader ovate obtuse. Petals lanceolate acute nearly as large as the upper sepal. All yellow with red stripes. Lip fleshy ovate cordate obtuse dark maroon colored \( \frac{1}{4} \) inch long with 2 raised lobes at the base, and a mass of papillae on the disc. Column short with a long foot, the apex free, arms triangular oblong obtuse. Climbing on trees on the lower slopes of the Mount Ophir range.

*B. tenerum*, n. sp. Rhizome slender filiform pseudobulbs ovoid \( \frac{1}{4} \) inch long about \( \frac{1}{4} \) inch apart. Leaf oval half an inch long not petiolate. Scape slender red 2 inches tall with a few bracts at the base. Flowers 3 at the top of the stem \( \frac{1}{4} \) inch long, shortly pedicelled. Upper sepal lanceolate acuminate, laterals much longer slightly gibbous at base, purple bases green. Petals ovate elliptic much shorter green. Lip small recurved acute purple. Column thick curved green foot as long purple, arms long linear curved acute.

Lankawi Islands (Curtis).

Very small few-flowered species allied to *B. hirtulum*, Ridl.

*B. cincinnatiatum*, n. sp. Very small plant pseudobulb very small. Leaf elliptic obtuse closely nerved, 4 inches long 2 inches wide, scape very slender 2 inches long. Flowers \( \frac{1}{6} \) inch long, 2 on the apex of the scape. Bracts ovate very short ovary and pedicel \( \frac{1}{6} \) inch long. Sepals lanceolate subacute nearly equal brown, hairy. Petals brown linear oblong falcate hairy. Lip obtuse with long white hairs. Column short foot as long, arms short.

Perak, Batu Tujoh (Curtis).

This is another of the small species with a few small flowers on the end of a slender scape. The curious white curly hairs on the lip are perhaps its most striking characteristic.

*B. brevipes*, n. sp. Rhizome woody, pseudobulbs \( \frac{1}{2} \) to \( \frac{3}{4} \) an inch apart cylindric conic curved. \( \frac{1}{2} \) inch long. Leaf elliptic shortly petiolate one inch long \( \frac{1}{4} \) to \( \frac{1}{3} \) inch wide.

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apex subacute coriaceous; raceme very short about 6 flowered \( \frac{1}{4} \) inch long. Flowers pale yellow. Bracts lanceolate much longer than the ovary. Sepals subequal lanceolate acuminate \( \frac{1}{3} \) inch long. Petals about \( \frac{1}{3} \) of the length elliptic blunt. Lip shorter curved thick fleshy deeply grooved base clawed, with two strongly raised ridges or wings from the base. Column short and thick with a short foot, arms erect narrow acuminate.

Perak, Bujong Malacca (Ridley), Scortechini drawing 176. Allied to *B. Gamblei*. Hook. fil., but with a much shorter peduncle.

*B. ochranthum*, n. sp. Pseudobulbs densely crowded oblong conic \( \frac{1}{4} \) inch long. Leaf linear-lanceolate acute base narrowed \( 1\frac{1}{4} \) inch long, \( \frac{1}{6} \) inch wide. Scape nearly as long flowers 5 or 6 crowded in a head about \( \frac{1}{4} \) inch long. Bracts lanceolate shorter than the ovary; upper sepal narrow linear-lanceolate acuminate, laterals one quarter longer, all white with yellowish tips. Petals less than half as long as the upper sepal lanceolate obtuse white. Lip small tongue shaped acute recurved yellow. Column thick foot shorter, arms narrow linear acute curved.

Perak. Thaiping Hills, at 3000 to 4000 feet elevation (Curtis).

*B. (Cirrhopetalum) Curtisii*, n.sp. Rhiome slender creeping, with ovoid conic pseudobulbs \( \frac{3}{8} \) inch long, \( \frac{1}{2} \) an inch apart. Leaf elliptic oblong obtuse thick 1 to \( 1\frac{1}{2} \) inch long, half an inch wide, very shortly petioled. Scape slender 2 to 3 inches long with a lanceolate-pointed sheath in the middle. Flowers about 5 crowded at the top. Bracts lanceolate acuminate. Upper sepal triangular lanceolate laterals quite free, linear flat narrow \( \frac{3}{8} \) inch long yellow. Petals falcate lanceolate glabrous, brown. Lip small tongue-shaped fleshy curved. Column broad arms triangular short.

Findings. In Mangrove swamps (Curtis).

*B. perakense*, n. sp. Pseudobulb conic \( \frac{1}{4} \) inch long. Leaf elliptic narrowed at the base 2 to 3 inches long, \( \frac{1}{2} \) inch wide.
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coriaceous, scape 3 to 4 inches long fairly stout; flowers crowded numerous glabrous; bracts lanceolate acuminate. Upper sepal ovate acute, laterals $\frac{2}{3}$ inch long connate for half their length, tips acuminate. Petals nearly as large as the upper sepal, ovate lanceolate acute. Lip tongue-shaped channeled above, but little curved; column arms triangular obtuse erect broad.

Perak, on the Waterloo Estate near Kwala Kangsa. (Sir Graeme Elphinstone).

*Dendrochilum angustifolium*, n. sp. Rhizome long woody terete, pseudobulbs 1 to $1\frac{1}{2}$ inch apart or closer, subcylindric $\frac{1}{4}$ to $\frac{3}{4}$ inch long. Leaf narrowly linear lanceolate 2 inches long, $\frac{1}{4}$ inch wide blunt; mucronulate, narrow at the base, scapes solitary or several together on a stout short peduncle from the base of the pseudobulbs with numerous basal sheaths 3 to 4 inches long. Flowers numerous greenish white $\frac{1}{3}$ inch long. Bracts ovate subacute half the length of the ovary, rachis scabrid. Sepals linear lanceolate. Petals narrower. Lip narrow lanceolate to obtuse with 2 thick ridges at the base and a lower one between them. Column short upper margin hooded minutely toothed, arms linear from near the base. Capsule half-an-inch long subglabose ovoid three-angled.

Selangor, Bukit Hitam, (Kelsall).
Pahang, K’luang Terbang, (Barnes).

*D. ellipticum*, n. sp. Rhizome long woody branched yellow, pseudobulbs conic-cylindric curved $\frac{3}{4}$ inch long. Leaf thinly coriaceous elliptic oblanceolate obtuse 3 inches long by one inch wide. Scapes 3 inches long with large sheaths at the base; bracts ovate acute nearly as long as the short ovary. Flowers $\frac{1}{3}$ inch long rather fleshy. Sepals lanceolate acute, apex thickened terete. Petals similar but narrower. Lip pandurate obtuse pustular, basal ridges obscure forming a pustular mass. Column rather long, hood with three teeth, arms from about half-way up the column, linear longer than broad.

Singapore, Sumbawang, (Ridley 6536).

A curious little species on account of its pustular lip.

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It is interesting as being the only low country species, the rest being all mountain plants.

*Eria pendula*, n. sp. Stems terete 2 or 3 feet long \( \frac{1}{4} \) inch through leafy. Leaves narrowly linear lanceolate acuminate 4 inches long \( \frac{1}{4} \) inch wide sheaths dilate upwards \( \frac{3}{4} \) to 1 inch long. Racemes lateral hardly \( \frac{1}{2} \) inch long with several lanceolate acute red brown bracts half an inch long. Flower solitary nearly an inch across white. Pedicel and ovary \( \frac{1}{2} \) inch long red. Upper sepal obtuse laterals broadly ovate reflexed, mentum short very broad and blunt. Petals oblong rounded as broad or broader than the upper sepal. Lip shortly clawed broad obovate rounded, side lobes indistinct, midlobe longer broad keels 2 curved plates on the disc. Column stem foot long.

Selangor at the Kual Lumpur Caves (Kelsall). Perak (Scortechini, drawing). Borneo Sarawak.

*Eria* (*Trichotosia*) *cristata* n. sp. Stem a foot tall, leaves lanceolate acuminate oblique 3 inches long \( \frac{1}{2} \) inch wide, coriaceous almost glabrous above hairy beneath sheaths glabrescent when old, very hairy when young, half an inch long. Racemes short \( \frac{1}{4} \) inch long very hairy, lowest bract cup-shaped; upper ones ovate lanceolate acute \( \frac{1}{2} \) inch long much longer than the ovary; flowers 2 to 3 half an inch long. Sepals lanceolate acute covered with red hair, mentum as long blunt; petals linear obtuse much narrower, lip with a very long claw pubescent at the base spathulate tip rounded retuse, glabrous except for the ends of the three raised veins which are covered with short clubbed hairs; column base pubescent.

Penang, and Lankawi Island at Terutau, (Curtis 1696).

*E. rotundifolia*, n. sp. Stems slender forming a matted mass. Leaves in small tufts on short stems \( \frac{1}{2} \) inch long, fleshy thick obovate blunt hairy \( \frac{1}{4} \) inch long. Flowers \( \frac{1}{4} \) inch long on a very short pedicel solitary with 2
cupular bracts with a short point, upper one longer than the ovary; upper sepal oblong ovate, laterals much broader, mentum rather large rounded. Petals oblong obtuse; all greenish yellow, billows on the outer surface. Lip oblong obtuse, tip broader three-lobed; side lobes small, midlobe rounded, all denticulate greenish yellow with a central raised bar ocreous, and some purple spots on each side, column short foot long olive green; anther orange conic one-celled, apex with a short blunt point, front edge emarginate. Pollinia 8 subequal.

Penang, above the Waterfall (Curtis).

A very curious plant forming large masses of small tufted leaves something like those of Dischidia mummularia. It is allied to E. dasyphylla, Par., a native of India, and E. microphylla, Bl. of Java. From the former it differs in its shorter rounded leaves, much shorter peduncle and longer mentum. The lip is broader at the tip and 3-lobed, and is differently colored. The anther is also quite different in shape having a kind of blunt conic boss on the top.

Ceratostylis puncticulata, n. sp. Stems slender weak curved to 3 4 inches long but little branched, sheaths short ampiculate, mucronulate, minutely punctate. Leaves narrowly elliptic lanceolate blunt, petiolate 2 inches long ¼ inch wide. Flowers in pairs on short slender pedicels with minute bracts. Sepals lanceolate acute. Lip spathulate with an acute thickened tip.

Perak, Thaiping Hills at 5000 feet elevation.

Calanthe mutabilis, n. sp. Habit of C. veratrifolia. Leaves broad ovate lanceolate acuminate 12 inches long 4 inches wide. Scapes stout 20 inches tall sometimes branched, raceme about 6 inches long-many flowered. Bracts persistent oblong obtuse ¼ inch. Pedicels slender 3 4 inch long. Upper sepal broadly lanceolate ovate laterals lanceolate acute ¼ inch long. Petals narrow linear. All white. Lip claw very short with 3 large lanceolate papillae and a number of small ones, terminal lobe broad ¼ inch across reniform bilobed at the apex, white with claw and

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base of midlobe yellow, at first, becoming ocreous orange after one or two days and fading red orange. Spur very slender an inch long obtuse decurved. Column thickened round the stigma, anther shortly bluntly beaked.

Sumatra, Deli, imported with *C. veratrifolia* and cultivated in the Botanic Gardens, Penang. Fl. September.

This plant Mr. Curtis says is indistinguishable from *C. veratrifolia* in leaves and habit. The flower is however quite different. The broad kidney-shaped bilobed lip, colour changing from white tinted with lemon yellow at the base to dull dark orange red is very striking. The branched scape a most unusual character in Calanthe is not apparently rare, as it has been produced in two out of three plants cultivated by him.

*C. albo-lutea*, n. sp. A large plant with broadly lanceolate acute leaves 2\(\text{\textfrac{1}{2}}\) feet tall, 4 inches wide with strong ribs petiole stout 8 inches tall, scape over 1\(\text{\textfrac{1}{2}}\) feet long, stout. Bracts caducous, flowers about half an inch across, pedicel and ovary \(\text{1\textfrac{1}{4}}\) inch long. Sepals and petals short broad ovate acute white. Lip 3 lobed white with yellow base, lobes very short falcate acute, midlobe obovate rounded reniform broad, bilobed, calli 2 short semiovate ridges at the base, spur shorter than the pedicel thick blunt clubbed curved.

Perak (Scortechini), Bujong Malacca (Ridley), Larut Hills (Derry).

*C. aurantiaca*, n. sp. Rhizome fairly stout, leaves narrow lanceolate acuminate 12 inches long \(\frac{3}{4}\) inch wide, petiole 3 inches long. Scape slender a foot tall with a large lanceolate sheath towards the base. Bracts caducous. Flowers \(\frac{1}{3}\) inch across orange. Pedicel and ovary slender \(\frac{1}{2}\) inch long. Sepals ovate apiculate \(\frac{1}{2}\) inch long. Petals much broader. Lip narrow, side lobes subtriangular ovate, midlobe narrow linear oblong obtuse red. Keels 2 short semiovate. spur slender sigmoid blunt. Rostellum long beaked.

Perak, Bujong Malacca (Ridley).
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*C. microglossa*, n. sp. Pseudobulb short; Leaves distichous lanceolate acuminate 6 inches long, 2 inches wide. Scape stout a foot tall, with a large swollen sheath. Bracts lanceolate acuminate pule caducous. Flowers small ovary and pedicel ¼ inch parts distinct. Sepals ovate acuminate ½ inch long orange. Petals shorter orbicular ovate rounded. Lip shorter very small scarlet, oblong spathulate base broad narrowed in the middle; apex de-flexed with two elevated ridges at base, spur as long as ovary thick scrotiform, rostellum and anther not beaked.

Sumatra, East Coast, (native collector) near *C. Scor-techinii*, but with a differently formed and colored lip. It has quite the appearance of *C. curculigoides* at a little distance. It was sent with other orchids from the East Coast of Sumatra by a native and flowered in the Botanic Gardens, Singapore.

*Coelogyne densiflora*, n. sp. Pseudobulbs long cylindric-conic narrow 4 inches long. Leaves lanceolate acuminate 15 inches long 1¼ inch wide, petiole 2 inches long. Scape pendulous 8 inches long dense flowers numerous smaller than in *C. Dayana*, rachis and ovaries not nigrohirsute. Bracts red brown oblong truncate half an inch long and as wide; sepals lanceolate acute; petals narrower ½ inch long brownish. Lip, side-lobes short acute, apices narrow, outside white, inside brown with white streaks; midlobe orbicular, shortly apiculate, edge white, centre red brown with a large yellow central papillose mass; keels on the disc between the lobes crested. Column hood retuse anther white.

Selangor, on Bukit Hitam, (Kelsall)

*C. pallens*, n. sp. Rhizome stout, pseudobulbs subcylindric 2 to 3 inches long wrinkled. Leaves 2 elliptic or oblanceolate 3 to 6 inches long 1 to 1½ inch wide petiole 1 inch long. Scape from the top of the pseudobulb, base nude with 1 persistent bract. Raceme 6 inches long flexuous. Flowers 2 inches across. Sepals lanceolate acute pale green. Petals linear filiform. Lip white lateral lobes

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long with subacute long pubescent tips, base saccate midlobe as long, with 2 long sinuous brown keels. Column hood three lobed central lobe long undulate. Anther conic not beaked.

Perak, Thaiping Hills (Curtis). Bujong Malacca (Ridley).
This is closely allied to C. anceps, Hook fl. Ic. Pl. 2109 but the scape is terete not compressed and the petals are much narrower.

Saccolabium Machadonis, n. sp. Stems curved slender 12 inches long. Leaves terete recurved 3 inches long $\frac{1}{2}$ inch thick apex pungent. Racemes 2 inches long. Flowers scattered $\frac{3}{4}$ inch long; sepals linear oblong obtuse. Petals narrower all recurved olive yellow. Lip pale violet, side lobes erect oblong truncate, midlobe much longer flat hastate triangular acuminate obtuse spur short curved blunt olive-yellow, upper callus in mouth rounded hemispheric with an anchor-shaped process on the top, lower edge of callus truncate pubescent, lower callus conic ending in a lamina running to the back of the spur. Column short stout sigmoid olive yellow. Anther flattened 1 celled hemispheric, pollinia sub-globose on a broad elongate candicle tapering upwards to the point and fixed to the saddle-shaped disc. Rostellum lobes broad deflexed parallel oblong.

Johor. On Gunong Banang, Batu Pahat.
This species is allied to S. halophilum, Ridi., but differs in the violet hastate lip and the remarkable callus in the mouth of the spur. It is named after Mr. A. D. Machado with whom I collected the plant which flowered in the Botanic Gardens.

S. rugosulum, nsp. Stem stout 6 inches long. Leaves linear narrowed at the base, apex bilobed mucronate 5 inches long $\frac{1}{2}$ inch wide, sheaths $\frac{1}{2}$ inch long deeply transversely wrinkled. Racemes short $\frac{1}{2}$ inch long stout with a few cup-shaped sheaths at the base. Flowers $\frac{1}{4}$ inch across, on pedicels $\frac{1}{2}$ inch long yellow-spotted with red. Sepals ovate coriaceous. Petals thinner pallid. Lip boat-shaped, side lobes very short oblong, midlobe fleshy
ovate grooved ending in a long slender horn bifid at the tip, spur very short conic blunt. Column large arms rounded.

Kedah, on Kedah Peak.

*S. (Cleisostoma) hortense*, n. sp. Stem stout 1 to 2 inches long or more. Leaves obovate, coriaceous blunt unequally bilobed 4 to 6 inches long $\frac{1}{4}$ inch wide. Scape erect taller than the leaves, base nude apex racemed or more usually with a few branches. Bracts small ovate. Flowers $\frac{1}{4}$ inch across. Sepals oblong obtuse, laterals broader. Petals narrower yellow with red edges. Lip yellow, side lobes small erect with two subacute points, midlobe broader ovate acute, spur scrotiform very broad red, callus in the mouth of the tube a thin lamina bifid at the apex. Column short and broad. Anther broad abruptly truncate beaked; pollinia elliptic, caudicle linear very narrow disc ovoid, rostellum entire. Capsule elliptic oblong an inch long.

Singapore Jurong; Johor, Tana Runto, Malacca, Sungei Rambai (Derry) Perak (Scortechini's drawings No. 53); Penang, Tanjong Bunga (Curtis 1834). This little plant generally occurs in orchid trees, and I cannot think how it has escaped being described for so long. It grows also in Borneo. Its flowers resemble those of *S. latifolium*, Ridl. *Cleisostoma latifolium* and *C. fuscum*, Lindl., but it has a much smaller stem than that plant and the panicle is much smaller.

*S. arachnanthe*, n. sp. Stem tall climbing; leaves oblong obtuse 4 inches long 1$\frac{1}{2}$ inch wide sheaths $\frac{1}{4}$ inch long. Panicle 2$\frac{1}{2}$ feet long with a long nude peduncle purple, branches 3 or 4 inches long spreading. Flowers scattered $\frac{1}{2}$ inch across, pedicels longer slender. Bracts small ovate. Sepals and petals spreading spatulate obtuse, lateral sepals falcate white with purple spots at base. Lip fleshy side lobes indistinct forming a wall round the entrance of the spur, midlobe ovate broad short, spur broad saccate rounded large, all white, callus in the mouth oblong notched. Column short and broad, rostel-
lum short. Anther thin depressed hemispheric. Pollinia 2 globose, caudicle broadly linear, disc half as long oblong.

Perak and Kedah collected by Mr. Curtis from whom I have received specimens and a colored drawing. The habit of this plant is that of a Renanthera but the flowers rather are those of a Seccolabium of the section cleisostoma

*S. patinatum*, n. sp. Stem very short hardly an inch long. Leaves 2 to 3 very coriaceous oblong obtuse broadly bilobed 7 inches long by 2 inches wide. Raceme very short rachis stout, flowers about $\frac{6}{4}$ inch across. Sepals obovate spatulate blunt. Petals narrower yellow with red spots. Lip saccate rounded, no distinct side lobes, terminal lobe ovate triangular entire glabrous blunt all white with violet spots. Column very short and broad at the base pink, no arms, anther obtuse conic in front triangular bifid. Pollinia oblong globose half split, candicle linear, disc oblong hastate. Rostellum bifid. Capsule elliptic narrowed at base 2 inches long.

Pahang, Kota Glanggi (Ridley).

Distrib., Borneo.

This is probably the *S. Calceolare*, collected in Perak by Carter in Fl. Brit. Ind., as it much resembles that species when dry. It differs from *S. Calceolare* in the entire smooth lip.

*S. Myosurus*, n. sp. Stems short 1 to 2 inches long crowded together and forming a dense mat with copious roots. Leaves lanceolate falcate subacute 3 inches long $\frac{1}{2}$ inch wide, sheaths $\frac{1}{2}$ inch long. Scapes slender 3 inches long scabred at the base, racemes thickened 1 inch long, bracts ovate very numerous blunt. Flowers minute. Sepals lanceolate oblong falcate. Petals narrower, lip side lobes oblong erect, midlobe ovate lanceolate shorter, spur pendulous as long as the ovary. Column short and broad. Capsule cylindric $\frac{1}{2}$ inch long, pedicel $\frac{3}{8}$ inch long.

Pahang at Kwala Tembiling.

A very curious plant, with the habit, foliage and ra-
Ascochilus teres, n. sp. Stem 6 inches or more tall slender. Leaves terete acute 4½ inches long ½ inch thick, sheaths ½ inch long ribbed and transversely wrinkled. Raceme slender 4 inches long. Flowers few scattered ¼ inch across. Bracts very small ovate, ovary and pedicel ½ inch long. Upper sepal oblongate hooded; laterals oblong ovate oblique much larger. Petals broadly spatulate oblique shorter. Lip side lobes erect lanceolate falcate, midlobe hastate, basal lobes rounded apex subacute spur half the length curved obtuse. Column as long as its foot nearly as long as the petals, arms short and broad.

Johor, Bukit Banang, Batu Pahat, (Ridley).

The habit of this is just that of a Luisia or one of the Saccolabiums and not at all like the rest of this genus.


Pahang, Kwala Tembiling.

Sarcochilus virescens, n. sp. Stem very short; Leaves lanceolate subacute 1 ½ inch long ½ inch wide or less. Raceme an inch long. Bracts ovate, flowers an inch across. Sepals ovate acute. Petals narrower lanceolate. All light green. Lip very short white, side lobes short rounded, midlobe represented by an orange callus, spur short broad conic, column short and thick, foot as long curved. Anther orange beak triangular.

R. A. Soc., No. 39, 1903.
NEW MALAY ORCHIDS

Perak at Tapah. Collected by Mr. Aeria, flowered in the Botanic Gardens in Penang.


Pahang, Tahan River, (No. 2370).

This plant has the inflorescence of one of the *P. pen- dulus* section, and indeed has been referred to that species, but the flowers are quite different and the callus on the lip is rather that of *P. cornutus*.

*Zencine rupestris,* n. sp. Whole plant 6 to 8 inches tall slender, leaves few lanceolate narrow blunt ½ to ⅔ inch long ⅜ inch wide, scape slender pubescent. Flowers 2 terminal ¼ inch long white. Sepals ovate hairy, petals adnate to the upper sepal. Lip base saccate with 2 linear subulate processes inside, limb clawed with a terete minutely toothed claw blade bifid lobes oblong, truncate. Column short rostellum lobes linear blunt incurved. Capsules erect ¼ inch long.

Penang on rocks at the top of Government Hill on the way to Richmond pool, (Curtis 2823). A very slender little white-flowered thing remarkable for the long narrow claw of the lip which thus more resembles that of an Anoectochilus.


Jour. Straits Branch
Lip base saccate adnate to the column by the edges glabrous within with a raised central keel and a tuft of digitate processes on each side. Apex of lip acuminate subulate column short. Anther very long acuminate. Pollinia ½ inch long clubbed with a pair of caudicles. Caudicles connate about half way down. Rostellum long shortly bifid, lobes acute, stigma large with thin walls.

Selangor at the Gap on the Pahang track, (Curtis). A single specimen only was found. The plant is allied to G. rubens, Bl., G. cordata, Hook. fil.

_Hetoeria parvifolia_, n. sp. A slender plant of exactly the habit of _Zeuxine clandestina_ Bl. Stem 2 inches long, leaves small lanceolate acute nearly sessile 1 inch long ¼ inch wide, sheaths ¼ inch long ampliate, scape slender pubescent 5 or 6 inches tall with several rather long distant acuminate sheaths. Raceme 2 inches long. Flowers very small ½ inch long appressed to the stem. Bracts narrow lanceolate acuminate nearly as long as the ovary, upper sepal adnate to petals ovate acuminate pubescent, laterals lanceolate acute. Lip base saccate with minute cylindric processes inside; apex lanceolate acute, sides at tip involute forming a tube not longer than the sepals. Column short dilated above. Rostellum arms nearly as long linear truncate. Anther with a long narrow beak.

Penang, Government Hill. I collected this plant at the same time as Mr. Curtis and myself got _Zeuxine rupestris_.

B. A. Soc., No. 89, 1903