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NORTH QUEENSLAND NATURALISTS' CLUB

Meets at School of Arts, Shields Street, Cairns.
usually on second Tuesday in alternate months, at 8 p.m.

Next Meeting, Tuesday, 12th March.

Lecture by Mr. Herbert V. Chargois, F.R.P.S., "Nature Photography."

MEETINGS AND EXCURSIONS

Sunday, 9th Dec., 1945: Excursion to Wright's Creek. Attendance 8.

Tuesday, 8th Jan., 1946: Lecture by Capt. J. H. Parry, A.A.M.C., "Part Played by Microrrhiza in Plant Economy."

Sunday, 3rd Feb., 1946: Excursion to Pease Panorama. Attendance 17.

New Members Elected: Mr. Reg. Rees, 163 McLeod St., Cairns; Mr. and Mrs. Sheehan, Edge Hill; Miss I. Parker, Intermediate School, Cairns; Mr. and Mrs. A. Gray, National Bank Chambers, Cairns; Mr. and Mrs. T. F. Webb, Hides Hotel, Cairns; Mr. A. Atkinson, Esplanade, Cairns.

New Food-Plant of Saw Flies (Hymenoptera, Tenthredinidae)

(By MAURICE F. LEASK, Member F.N.C.V. and N.Q.N.C.)

The family of saw-flies, in other parts of the world, in the larval stage feed on a variety of plants, including species of **Hicoria, Quercus, Sambucus, Rubus, Salix and Betula.**

"It is somewhat remarkable that in every country (except Australia) where these insects are well represented in the fauna that they have become more or less pests upon cultivated trees and plants." (1) In other countries, then, these insects feed upon the leaves of the pear, quince and plum, as well as on the stems of small grains.

Among Australian saw-flies, of which the dominant genus is **Perga**, it has been established that Eucalypts constitute the food-plant of the majority of species.

The larvae of **Perga dorsalis** (Leach) have been recorded feeding on **Eucalyptus nova-anglia, E. gummifera** (Bloodwood), **E. camuldulensis** (River Red Gum), **E. obtusiflora** and **E. citriodora.**

On the other hand, one species of plant may serve as a host for numerous species of saw-flies: this is the case with **E. gummifera,** which is the food-plant of **Perga dorsalis, P. Lewisii, Pergagrapta divaricata** and **P. spinolae.**

Other plants recorded as hosts in Australia are **Leptospermum, Melaleuca** and **Rubus (2).** From the other dominant genus of Australian trees, Acacias, only adult specimens of saw-flies (Neoeurys sp.) have been described, these being found on the flowers.

This description records for the first time that larvae of one of the Pergas, (3) feed on an entirely new food-plant, **Syncarpia procera** (Salisb.). Domin, of the family **Lauraceae,** and known as the "Turpentine" (4). These trees occur typically mixed with Casuarinas, and there are Bloodwoods in the neighbourhood. **"Syncarpia** is characterised by the flowers being in heads (Fig. A. 1.). Three species occur in Queensland." (5).

In several different areas north and south of Spring Creek, Wondecla, North Queensland, at an altitude of 3,100 feet (average), these larvae were observed on the suckers (Fig. A, 1.) of Turpentine.

(1) Froggatt, W. W., "Agricultural Gazette of N.S.W.," Vol. XII.
(2) Leask, M. F., "Records of Two Sawflies," N.Q.N., Vol. XI, No. 69, 1st Sep., 1943.
(3) Determined by Govt. Entomologist, Dept. of Agric. and Stock, Brisbane.
(4) Determined by N.Q.N.C.
(5) White, C. T., "Principles of Botany," p. 190.

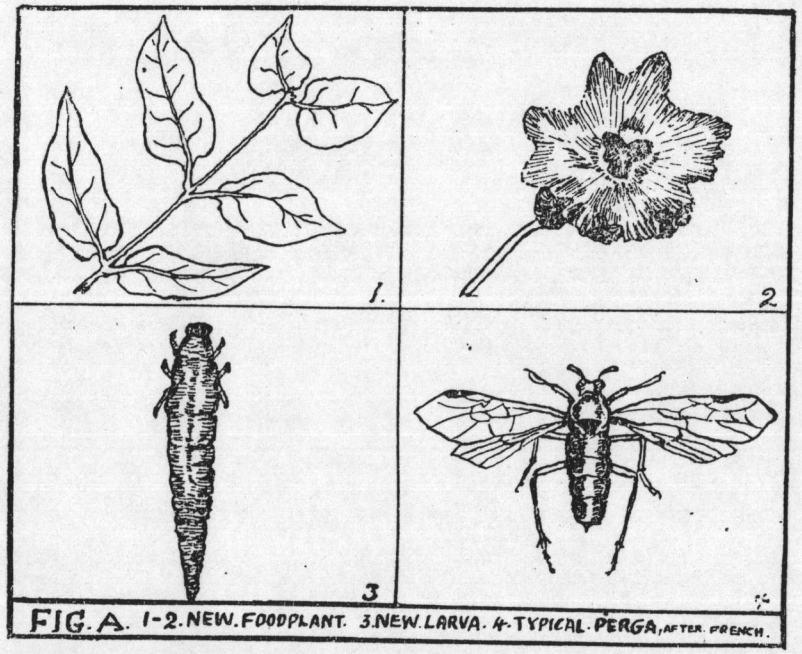


FIG. A. 1-2. NEW. FOODPLANT. 3. NEW. LARVA. 4. TYPICAL. PERGA, AFTER. FRENCH.

The first specimens, well-grown grubs, were seen on 25th June, 1944; others were on the plants until 27th September, 1944.

Some entered the soil to pupate on 2nd July, 1944, others on 13th July, 1944, and the latest on 27th September, 1944.

The adults emerged.

Some Tachinid parasites (Diptera) emerged from others of these larvae.

Several characteristics make the larvae of this as yet undetermined species of **Perga** or **Pergagrapta** unique; they are the first grubs I have encountered that exude a BRIGHT ORANGE exudation, as distinct from the yellow spittle of species feeding on Eucalypts.

The stems of **Syncarpia** suckers are red; the underchests of the larvae are orange. This is the most pronounced coloration yet seen on saw-fly larvae.

All members of the bunch enter the ground simultaneously, but make separate cocoons, prefering the gravelly soil for this purpose, although a choice of soil was offered in the cage.

The larvae do not drop off the plant when it is disturbed. They are of typical **Perga** structure (Fig. A, 3.), medium-sized, and smaller than **Perga dorsalis.**

Breeding of these imagines (Fig. A. 4), was made possible by the co-operation of Mr. A. R. Brimblecombe, Department of Agriculture and Stock, Brisbane. The adults have not yet emerged (6.3.46).

A New Orchid Genus and Species from North Queensland.

By the Rev. H. M. R. RUPP, Northbridge, N.S.W.

MOBILABIUM, n. gen.

Plantae epiphyticae, parvae, **Sarcanthi tridentati** habitu. Radices serpentes vel saepius aerii, aliquantum crassi. Caules solitarii, elongati, articulati, cum bracteis appressis. Folia usque ad 7, late linearia marginibus reflexis, ad apices recurva. Racemi moderate numerosi, diu pertinaces, plerumque breviores quam folia. Flores usque ad 12, parvissimi. Sepala petalaque ad columnae pedem affixa, aequilonga, patentia, lanceolata

sed vix acuta: petala paulum angustiora quam sepala. Labellum saccatum, mobile in unguem brevem ad columnae pedis basem affixum, trilobatum. Lobi laterales plus minusve triangulares, erecti vel saepe reflexi: lobus intermedius minutissimus vel fere obsoletus. Saccus obtusissimus, intus callis duobus (?) multo sub foramine. Columna multo proflexa: rostellum breve, bifidum: anthera bilocularis, rostrata. Pollinia 2, fere globosa.

Small epiphytes resembling in habit **Sarcanthus tridentatus.** Roots creeping or more often aerial, rather thick. Stems solitary, elongate, jointed, much covered with appressed bracts. Leaves up to 7, broad-linear with recurved margins, reflexed at their apices. Racemes several, long persistent, usually shorter than the leaves. Flowers up to 12, very small. Sepals and petals attached to the column-foot, equal in length, spreading, lanceolate but hardly ever acute; petals a little narrower than the sepals. Labellum saccate, mobile on a short claw attached to the base of the column-foot, trilobate. Lateral lobes more or less irregularly triangular, erect or often reflexed: intermediate lobe very diminutive or almost obsolete. Sac very obtuse, with two (?) calli inside much below the orifice. Column much bent forward: rostellum short, bifid: anther two-celled, beaked. Pollinia 2, almost globose.

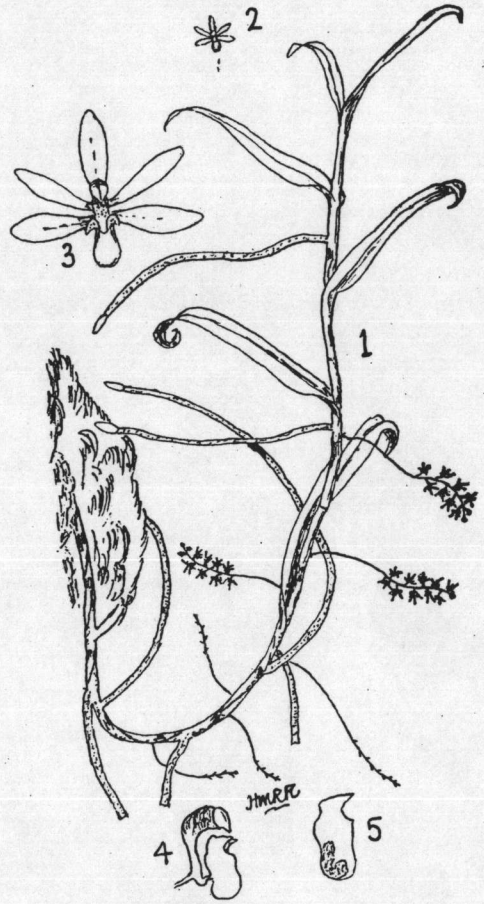
M. hamatum, n. sp.

Species generis proprietatibus. Planta usque ad 35 cm longa. Folia 4-7 cm longa, rigida, ad apices hamata vel interdum revoluta. Flores fuscovirides maculis rubris. Sepala petalaque circiter 3 cm longa, paulum incurva. Labelli lobi laterales acute sed inaequaliter triangulares, plus minusve maculati, plerumque recurvi (saltem in speciminibus meis.) Columna sub flexu maculata: stigma aliquantum obscurum.

Species with the general characteristics of the genus. Plant up to 35 cm long. Leaves 4-7 cm long, rigid, at their apices hooked or even revolute. Flowers brownish and green with red markings. Sepals and petals about 3 cm long, a little incurved. Lateral lobes of the labellum acutely but very irregularly triangular, more or less spotted, usually somewhat recurved (at least in my specimens.) Column spotted below the bend: stigma rather obscure.

ATHERTON TABLELAND AREA, N.Q. MAY, 1943, R. HUNT

In June, 1943, Mr. T. E. Hunt of Ipswich, South Queensland, sent me specimens of a number of orchids collected by his brother, then serving in the A.I.F., within the Atherton Tableland area. Amongst them, the plant which is the subject of the above descriptions at once arrested my attention by its distinctive appearance. It was not flowering; but although in its general habit it bore some resemblence to **Sarcanthus tridentatus** (Lindl.) Rupp, the narrow, rigid,



Mobilabium hamatum
n. gen. et sp.

KEY TO PLATE

1. Plant, about half natural size.
2. Flower, natural size.
3. Flower much enlarged.
4. Column and labellum from the side, showing the claw of attachment. Much enlarged.
5. Interior of labellum sac from the side showing what appear to be 2 calli near the bottom. Much enlarged.

"hooked" leaves suggested something as yet undescribed. The small plant sent to me failed to survive, as did a still smaller one subsequently received through Dr. H. Flecker from the same area. But Mr. T. E. Hunt succeeded in cultivating the larger plant which he had wisely retained, and towards the end of July 1945, several racemes began to open their flowers. In August a flowering raceme was forwarded to me, but although it was well packed and not unduly delayed, the diminutive flowers had so wilted that I could make no satisfactory examination of the details. Unfortunately Mr. Hunt had then left home for a holiday; but before leaving he had put the flowers from two racemes into a preserving solution, and these he sent to me as soon as he returned. After examining several, I sent a few to Mr. W. H. Nicholls of Melbourne for his opinion. We agreed that the orchid was undoubtedly a new species, but were both doubtful about the genus. Mr. Nicholls suggested with some hesitation that the plant might be regarded as a **Saccolabium** and in this opinion I was at the time disposed to concur. It certainly seems nearer to **Saccolabium** than to any other genus in the Sarcanthinae. The plant itself is more like a **Sarcanthus**; but if we are to accept (as I do without hesitation myself,) J. J. Smith's views on the distinctions between **Sarcanthus** and allied genera, our present plant is definitely excluded from the genus, for there is no trace of a callus at the orifice of the labial sac. Extended study of the flowers provided by Mr. Hunt has finally convinced me that this little orchid will not fit into any genus of the Sarcanthinae of which I have been able to obtain descriptions, and that a new genus is required to accommodate it. The outstanding reason for this conclusion is to be found in the fact that the labellum is neither sessile on, nor adnate to, the column-foot; **but is freely mobile on a short claw** connecting it with the basal extremity of the foot. On this claw it can be turned upside down and back again without any damage. Therefore I venture to make the plant the type of a new genus to be named MOBILABIUM, and I have given it the specific name **hamatum** in allusion to the hooked leaves, which are always prominently recurved, and in some cases even revolute.

I am not fully satisfied in regard to the calli which I have described as situated near the bottom of the interior of the labial sac. It is extremely difficult to bisect cleanly such a diminutive object, and the difficulty is increased when working with flowers preserved in a solution. Ultimately it may be found that there is a single bilobate callus: or it may even transpire that I have mistaken for calli what are merely lobed discolorations, or some distortions of the substances of the wall of the sac. Discoveries of such mistakes, however, would in no way affect the distinctiveness of the connection between labellum and column-foot. In all specimens examined, the **stigma** is so obscure that I have not attempted to define its form.

It will be clear from what I have said above that most of the credit for introducing this "new" orchid to the botanical public is due to Mr. T. E. Hunt of Ipswich, who has provided the material for examination, and who has also greatly helped me by forwarding an admirable pencil sketch of his plant, and by giving in full detail his own impressions of the characteristics of a living flower.

EDIBLE PLANTS OF NORTH QUEENSLAND.

By H. FLECKER. Continued

CONVOLVULACEAE:

206. **Ipomoea Batatas** Lam., **Sweet** Potato. Native of America.
Tubers eaten raw or cooked.
Young shoots substitute for spinach.

207. **I. Pes-caprae** Roth, Goat's-foot Convolvulus.
Roots eaten after being baked and hammered on stones. (Roth.)

208. **I. reptans** Poir.
Said to be cultivated as vegetable by Cingalese. (Bailey)

209. **I. gracilis** R. Br., Almor-ira.
Roots roasted and eaten. (Roth)

SOLANACEAE:

210. **Lysopersicum esculentum** Mill., Tomato., Native of South America.
Fruit eaten raw or cooked. Well known.