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A NEW SUBGENUS AND THREE NEW SPECIES OF POLYRHACHIS
F. SMITH (HYM., FORMICIDAE)

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## Morleyidris subg.n.

This new subgenus comes nearest to *Hedomyrma* Forel and agrees with most of the characters of that subgenus of *Polyrhachis* F. Smith; but the petiole is quite different in shape, being rounded at the base and armed with two circular curved spines.

Subgenotype: Polyrhachis (Morleyidris) trina sp.n.

Emery (1925, Gen. Ins., fasc. 183: 189) gives the characters for the worker of Hedomyrma as follows:—

'Corps plutôt massif. Dos du corselet obtusément marginé; pronotum plus ou moins bombé, généralement pas beaucoup plus court que le mésonotum et la face basale du métanotum pris ensemble; suture pro-mésonotale plus ou moins profondément impressionnée, la méso-épinotale totalement effacée . . . épines humérales courtes, les épinotales plus longues. Pétiole de forme constante . . . sur le profil, la face antérieure s'élève droite et fait un angle presque droit avec le plan dorsal, incliné en arrière et embrassé par les épines; celles-ci naissent de l'angle antérieur-dorsal décrit plus haut et contournent le plan dorsal, se prolongeant en courbe autour du segment basal du gastre. Segment basal du gastre grand.'

## Polyrhachis (Morleyidris) trina sp.n.

§. Black, very shining, extreme tip of antennae orange; clypeus and mandibles furnished with sparse golden hairs or bristles.

Head distinctly longer than broad, sides of head straight from eyes to anterior angles of cheeks, then rounded to base of mandibles, posterior part of head behind eyes rounded to posterior border, which is slightly projecting. Mandibles triangular, powerful, longitudinally striate and punctate, armed with four strong teeth, the apical three being fairly sharp, the apical one being the longest; the basal tooth is shorter, blunter and separated from the other three by a distinct space; clypeus large, convex, transverse, anterior border slightly projecting, with a small sharp tooth at each corner of the projection and two very small teeth between them in centre; frontal area not defined; frontal carinae with sharp, considerably raised edges, rather wide apart in middle, sinuate in front and behind, with a very narrow shallow furrow in centre between them; eyes round, convex, very prominent, situated at the posterior corners of head; antennae long and somewhat pubescent; scape long, slightly thickened at apex, extending beyond the pro-mesonotal suture; funiculus gradually and slightly thickened to apex, all the joints longer than broad, first joint considerably longer than second, last joint not quite as long as the two preceding taken together. Thorax longer than broad, high, margined, broadest before middle, narrowed in front, slightly contracted in middle; pronotum massive, convex, sides rounded to neck and finely margined, slightly longer than meso-epinotum, armed with two strong sharply pointed spines projecting forwards and outwards, concave at base on outer side, slightly convex before base on inner side; pro-mesonotal suture very marked, deep; meso-epinotum only slightly convex, suture between not present; epinotum armed with two long straight spines projecting backwards and outwards, declivity abrupt, almost flat, longer than dorsal surface; petiole armed with two long, curved, sharp spines projecting downwards and inwards, base almost circular, in some aspects apparently slightly excised, the spines also from some aspects more curved inwards (embracing the gaster more closely) than in the figure. Gaster short, globose, round-oval, rounded at base, slightly narrowed at apex. Legs long, finely transversely striate. Long. 7.7 mm.

Described from a single worker taken by Miss L. E. Cheesman, DUTCH NEW GUINEA, Mt. Cyclops, 3,500 ft., March, 1938.

Type in British Museum (Nat. Hist.).

I have described this species in honour of Mrs. Trina Morley (née

65 March,

Platanoff), to whom I am indebted for the drawing of the petiole and the reproduction of Emery's figure. The name of the subgenus is in honour of her husband, Mr. Derek Wragge Morley, an earnest and promising myrmecologist.



Fig. 1.—a, Petiole of Polyrhachis (Hedomyrma) daemeli Mayr, &, after Emery; b, petiole of Polyrhachis (Morleyidris) trina sp.n., &.

The following other subgenera of *Polyrhachis* have been described since the publication of the *Genera Insectorum*:—

Cephalomyrma Karawajew, 1935, Treubia, 15:115. Evelyna Donisthorpe, 1937, Entomologist, 70: 273. Florencea Donisthorpe, 1937, Ann. Mag. nat. Hist. (10) 19: 624. Johnia Karawajew, 1927, Trans. Mus. Zool. Kieff, 3: 43.

## Polyrhachis (Hedomyrma) nitens sp.n.

\(\delta\). Black, shining, extreme tip of antennae reddish yellow.

Head slightly longer than broad, slightly narrower in front than behind, posterior angles and border rounded, sides and cheeks finely longitudinally striate; mandibles narrow, longitudinally striate and punctate, masticatory border armed with three teeth, the apical one being the longest; clypeus large, convex, strongly carinate, anterior border projecting in centre with a sharp little tooth at each corner of the projection; frontal area indistinct; frontal carinae with sharp raised edges, sinuate in front and behind; eves round, projecting, situated at the corners of posterior part of head; antennae long; scapes long and narrow, slightly curved; funiculus with all the joints longer than broad, first joint longer than the rest, last joint about as long as the two preceding taken together. Thorax long, narrow, margined; pronotum as long as the mesonotum and epinotum taken together, strongly, distinctly and regularly longitudinally striate, the raised striae slightly narrower than the interstices, anterior angles armed with a sharp moderate spine projecting forwards and outwards; pro-mesonotal furrow narrow, but very distinct and deep; no furrow present between the mesonotum and epinotum; epinotum faintly longitudinally striate, armed with two long, sharp, curved spines projecting backwards, declivity abrupt; petiole typical Hedomyrma, the spines rather long and sharply pointed; gaster globose, short, oval. Legs fairly long. Long. 6 mm.

Described from a single worker taken by Miss L. E. Cheesman on WAIGEU ISLAND, Camp Nok, 2,500 ft., May, 1938.

Type in British Museum (Nat. Hist.).

This very distinct species is new to my 'List of the Ants of Waigeu Island' (1943, Ann. Mag. nat. Hist., 10: 433-75). It was found in a box containing other ants from New Guinea, but none from Waigeu. It brings the list of known forms for that island up to eighty-four.

## Polyrhachis (Hagiomyrma) semiobscura sp.n.

Head slightly longer than broad, narrowed anteriorly, posterior angles and border rounded; mandibles narrow, triangular, finely longitudinally striate and punctate, masticatory border armed with four teeth; clypeus large, convex, carinate, anterior border projecting in middle with two small blunt round projections on each side of the central carina and a little sharp tooth at each corner of the projection; frontal area indistinct; frontal carinae with rather sharp raised edges, sinuate in front; eyes round, convex, situated rather far back on head; antennae long; scapes slightly curved and compressed, all the joints of funiculi longer than broad, first joint longer than second, last joint as long as the two preceding taken together. Thorax margined, slightly convex, longer than broad, narrowed behind, broadest before anterior angles; pronotum with anterior angles rounded; promesonotal suture distinct, narrow in centre, widened at sides to form a distinct notch between pro- and mesonotum; meso-epinotal suture obsolete, indicated at sides by a slight excision; dorsal surface of epinotum shorter than mesonotum, declivity rather abrupt, epinotum armed with two moderate, slightly curved, sharp spines projecting backwards; petiole armed with two short curved spines embracing base of gaster; gaster longer than broad; legs moderate. Long. 6.7 mm.

Described from a single worker taken by Miss L. E. Cheesman, BISMARCK ARCHIPELAGO, New Ireland, Kavieng, October, 1936. Type in British Museum (Nat. Hist.).

British Museum (Nat. Hist.), London, S.W.7.

March 8th, 1944.