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DESCRIPTIONS OF A FEW ANTS FROM THE
PHILIPPINE ISLANDS, AND A MALE
OF POLYRHACHIS BIHAMATA
DRURY FROM INDIA.

Descriptions of a few Ants from the Philippine Islands, and a Male of Polyrhachis bihamata Drury from India. By HORACE DONISTHORPE, F.Z.S., F.R.E.S., &c., Department of Entomology, British Museum (Natural History).

Subfamily *PONERINÆ* Lepeletier.

Harpegnathos medio-niger, sp. n.

♂. Shining, head, pronotum, scutellum, post-petiole and gaster yellowish brown; eyes, rest of thorax and petiole black; mandibles yellow, antennæ, palpi and legs pale yellow. Whole body clothed with longer and shorter pale yellow outstanding hairs.

Head smooth and shining, transverse rounded from behind eyes to posterior border, which is slightly and widely excised and sharply and narrowly margined; *clypeus* large, transverse, slightly convex, somewhat narrowed posteriorly, anterior border almost straight; *frontal area* large, triangular; *frontal carinæ* short; *insertions* of antennæ entirely uncovered, situated behind the pointed base of frontal area, space between with a short narrow raised longitudinal line, or carina; *eyes* very large, oblong oval, prominent; *ocelli* large, situated on top of head; *antennæ* long, 13-jointed, *scape* short, *funiculus* with first joint shorter than scape, slightly longer than broad, rest of joints pubescent, much longer than broad, about equal in length and breadth, last joint a little longer than the preceding, pointed at apex; *mandibles* rudimentary, sharply pointed; *maxillary palpi* long, 5-jointed, 1st joint short, the rest elongate, 3rd joint longer than 2nd and 4th. *Thorax* elongate, narrowed in front and behind, broadest at insertion of the wings; *pronotum* transverse, narrowed to a neck anteriorly, posterior border widely and deeply excised, narrowly margined, disc smooth and shining, with a short transverse furrow enclosing a raised transverse central portion just before margin, sides sparsely punctate and transversely striate; *mesonotum* with two shallow narrow longitudinal impressed lines which are close together at anterior border, meeting before base of mayrian furrows and continuing more or less distinctly to basal border, a few shallow scattered oblong punctures occur on each side of these lines; *mayrian furrows* rather

broad, distinct, and longitudinally striate; rest of mesothorax behind mayrian furrows, and between parapasidal furrows, with scattered large shallow oblong punctures and some impressed lines, a deep longitudinal pointed furrow occurs outside parapasidal furrow; *episternite* and *epimera* of mesothorax and *episternite* of metathorax transversely striate, *furrow* between episternite and epimera of mesothorax deep, and widely longitudinally striate; *suture* between præscutellum and scutellum not defined; *præscutellum* consisting of a rather deep transverse hollow in centre, which is furnished with a number of widely separated raised longitudinal ridges; *scutellum* convex, prominent, smooth in centre, with shallow oblong punctures on anterior portion, and with rather deep hollows which are longitudinally striate at sides; *metanotum* transverse, narrow, smooth, convex, and prominent in centre, somewhat hollowed out and finely longitudinally striate at sides; *epinotum* longer than broad, narrowed to base, *dorsal surface* covered with a network of strongly-raised ridges, *declivity* flat hexagonal in shape, bordered by raised ridges, with a longitudinal raised ridge in centre from which raised transverse ridges branch. *Petiole* longer than broad with a high node rounded above, narrowed anteriorly with a small tubercle on each side before base and a very small blunt tooth beneath, upper surface smooth, sides covered with a network of closely-raised ridges, posteriorly somewhat triangularly excavated, the upper portion smooth, the lower with longitudinally-raised ridges; *post-petiole* smooth, pyriform in shape, considerably longer and broader than petiole, constriction between post-petiole and second segment of gaster very marked; *gaster* smooth, long oval, broadest before base of second segment; *pygidium* terminating in a fairly long curved sharply-pointed spine; *subgenital lamina* fairly long, bluntly pointed at apex; *cerci* present. *Wings* iridescent, *veins* and *pterostigma* yellow, one *discoidal cell* and two long *cubital cells* present, *radial cell* long, closed, appendiculate at apex. *Legs* long, slender, two *spurs* to posterior pairs of *tibiæ*, *claws* bidentate.

Long. 10.5 mm.

Described from a male taken by C. F. Baker at Mt. Banohao, Philippines, 1924—486.

Type in Brit. Mus. Coll.

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It is very like *H. pallipes* Smith, from Java, in appearance; but besides the difference in the colour, the sculpturation is considerably stronger. The hexagonal declivity of the epinotum in *pallipes* is without the raised ridges, and the petiole is armed with a strong curved tooth beneath.

Subfamily MYRMICINÆ Lepeletier.

Vollenhovia soleaferrea, sp. n.

♀. Dark reddish-brown mandibles, antennæ, anterior part of head narrowly, and legs red; masticatory border of mandibles and teeth black. Clothed with semi-decumbent longer and shorter yellow hairs.

Head subquadrate and subparallel, posterior angles rounded, posterior border slightly emarginate, sculpture consisting of more or less longitudinal raised ridges which form a network and enclose shallow oblong punctures; *mandibles* powerful, shining, punctate, masticatory border armed with five strong teeth; *clypeus* smooth and shining, strongly bicarinate, anterior border straight; *frontal area* small, triangular, deep, shining; *frontal furrow* broad and shallow, extending to median ocellus; *frontal carinæ* short, finely longitudinally striate inside of outer edges; *eyes* fairly large, oval, convex, situated in about centre of sides of head; *ocelli* small; *antennæ* 12-jointed, *club* 3-jointed *scape* barely reaching posterior border of median ocellus, *funiculi* gradually thickened towards apex, joints 2-6 strongly transverse, 7-8 less so, last joint pointed, about equal in length to the two preceding joints taken together. *Thorax* longer than broad, narrowed to base, broadest at insertion of anterior wings; *pronotum* transverse, humeral angles obtuse but prominent, covered with rather large shallow punctures except at anterior border, which is narrowly smooth; *pro-mesonotal suture* well marked, deep; *mesonotum* longer than broad, only slightly convex, with a narrow space extending from apex to base, pointed behind, smooth, rest covered with a series of shallow punctures arranged in longitudinal rows; *præscutellum* only visible at sides, punctured; *suture* between mesonotum and scutellum very narrow but distinct; *scutellum* transverse, rounded above and below, only slightly convex, smooth in centre, with a few fairly large shallow punctures arranged in rows at sides; *metanotum* transverse, narrow, smooth in centre; *epinotum* with dorsal surface much

shorter than declivity, smooth and shining, with a few scattered shallow punctures, declivity in the shape of a horse-shoe, very slightly concave, smooth and shining; *node* of *petiole* rather high, thick, rounded above, anterior and posterior surfaces concave, smooth and shining, fairly striate and punctate at sides, armed beneath with a thin projecting, bluntly-rounded ridge or tooth; *post-petiole* broader than node of *petiole*, anterior border and dorsal surface round, sides straight, posterior border straight, narrowly margined, faintly transversely striate behind and with a few scattered shallow punctures on disc, armed beneath with a blunt tooth projecting downwards; *gaster* long oval, broadest behind middle, with a shallow narrow shining furrow with short raised longitudinal ridges at junction with *post-petiole*, first segment long, with a few small scattered punctures more numerous anteriorly; the other segments very finely coriaceous. *Wings* light brown *pterostigma* and *veins* darker, *anterior wing* with one *discoidal cell*, one long *cubital cell* and *radial cell* open, clothed with fine brown decumbent hairs, forming a fringe round the margins.

Long. 7.3 mm.

Type in Brit. Mus. Coll.

Described from a single winged female; Philippine Islands, Luzon, Mt. Makiling (*C. F. Baker*), Brit. Mus., 1924—486.

This species comes near to *V. oblonga* Smith, from Bortchian—its subspecies, *lævithorax* Emery, from Borneo; from the former it differs in having a much finer sculpture, the shoulders considerably more prominent, etc., and from the latter in being larger, more robust, less strongly sculptured, with more prominent shoulders, etc.

Only two other species and one subspecies of *Vollenhovia* have been found in the Philippines, and *soleaferrea* disagrees entirely with the descriptions of any of them.

Rhopalothrix (Rhopalothrix) subdentatus, sp. n. ♀

♀. Reddish brown, antennæ and legs lighter, somewhat shining. The insect has been rather rubbed, but there are a few unevenly scattered semi-decumbent white clavate hairs on body.

Head triangular, considerably broader behind eyes, forming lobes with truncate posterior borders, posterior border deeply emarginate; some slightly-raised longi-

= "banuensis" form of prosera Em.

tudinal ridges extend from base of clypeus, and towards posterior part of head form a network enclosing round shallow punctures; *mandibles* long, triangular, curved, masticatory border armed with 8 teeth, the apical one long and pointed, two small sharp teeth are situated about the middle beneath the masticatory row; *clypeus* large, triangular, slightly convex, anterior border straight, posterior border pointed and extending between the frontal carinæ, rather finely and shallowly punctured; *frontal carinæ* deeply excised in middle of outer sides, forming a lobe behind covering the profound and deep *scrobes*; *antennæ* 7-jointed, rather short, *scape* triangular, flat above, broadly dilated at base, nearly as long as funiculus, anterior border fringed with a row of white outstanding clavate hairs; *funiculus*: first joint about as long as broad, broader and longer than second joint, last joint long and pointed, longer than the three preceding taken together; *eyes* convex, oval, moderate; *ocelli* small. *Thorax*, sculpture finely rugose, robust, narrowest at base; *pronotum* large, convex, transverse, narrowed anteriorly, sides rounded, posterior border very emarginate; *pro-mesonotal suture* very distinct; *mesonotum* large, narrowed anteriorly, broadest just before base, not very convex, a smooth, longitudinal, rather broad, shallow furrow extends from centre of anterior border, not reaching the middle of mesonotum and diverging in a short V; *præscutellum* very narrow and transverse, suture between it and scutellum marked with a row of short longitudinal narrow raised ridges, spaces between smooth; *scutellum* convex, outstanding, narrowed and projecting posteriorly; *epinotum* with very short dorsal surface, declivity considerably excavated, armed on each side with a sharp-edged pointed projection. *Petiole* with a small rounded not very high node posteriorly, furnished, beneath with a narrow ridge pointed anteriorly; *post-petiole* transverse, convex, rounded at sides and anteriorly posterior border slightly projecting in middle, much broader than petiole; *suture* between post-petiole and gaster very distinct and deep; *gaster* longer than broad, long oval, sculpture finely but distinctly coriaceous, first segment very long. *Legs* short. *Wings* dusky brown, *pterostigma* and *veins* darker brown, covered with fine decumbent brown hairs which extend as a fringe beyond side margins and part of posterior margin, one

long cubital cell and long closed radial cell present, pterostigma narrow and ill-defined.

Long. 5 mm.

Type in Brit. Mus. Coll.

Described from a single winged female. Philippines, Luzon, Baguio (*C. F. Baker*), Brit. Mus., 1924—486.

This species has not been described before, nor is it a female of any known worker. Only two species have been recorded from the Philippines—*R. angulinoides* Stitz, ♀, and *R. manni* Menozzi, ♀, the descriptions of the head of neither of which agrees with that of our female. Some six species have been found in New Guinea, including *R. kokodensis*, described by us in 1936.

Subfamily *DOLICHODERINÆ* Forel.

Tapinoma philippinensis, sp. n.

♀. Black, tip of antennæ, what appears to be the lateral prolongations of the clypeus, extending into the clypeal fovæ, part of mandibles, base of first joint and last four joints of tarsi, and spurs red. Clothed with fine yellow pubescence and short outstanding yellow hairs, which are more abundant on the gaster. Sculpture very finely, minutely and closely coriaceous.

Head about as long as broad, narrowed in front, broadest just behind eyes, posterior angles rounded, posterior border excised in middle; *mandibles* powerful, tips crossed, masticatory border armed with 7 teeth; *clypeus* transverse, triangular, only slightly convex, anterior border almost straight; *clypeal fovæ* round, deep; *frontal area* and *furrow* very indistinct; *eyes* large, round, not very convex, situated at about centre of sides of head; *ocelli* small; *antennæ* 12-jointed, moderate, *scape* gradually broader towards apex, with transverse joints, last joint pointed, a little longer than the two preceding taken together. *Thorax* narrowed posteriorly; *pronotum* transverse, narrow; *mesonotum* convex, about as broad as long; *scutellum* convex, triangular; *epinotum* with very narrow dorsal surface, the *declivity* being considerably longer, rather abrupt, rounded, convex. *Petiole* with *scale* and *gaster* typically *Tapinoma*. *Wings* brownish, *pterostigma* and *veins* darker brown, small *discoidal cell*, one long cubital cell and long closed radial cell present.

Long. 5.3 mm.

Type in Brit. Mus. Coll.

Described from a winged female specimen. Philippine Islands, Luzon, Mt. Makiling (*C. F. Baker*), Brit. Mus., 1924—486.

This species is superficially like a large female *nigerrimum*, but the antennæ are shorter and the funiculi considerably stouter, the mesonotum is shorter and more convex, the scutellum is smaller and more convex, and the epinotum with the dorsal surface narrower and the declivity convex; the latter being flat in *nigerrimum*. Moreover, the anterior border of the clypeus is not deeply excised as in that species.

Subfamily *FORMICINÆ* Lepeletier.

Æcophylla smaragdina F., subsp. *subnitida* Emery, Ann. Soc. Ent. France, lx. p. 565 (1891), ♀.

♀. Typical *Æcophylla* female; yellowish testaceous; mandibles, scapes, base of first five joints of funiculus, two rather broad converging lines of mesonotum, and sides and epinotum brownish; teeth, and anterior border of scutellum narrowly, black.

♀ type in Brit. Mus. Coll.

Described from a deãlated female, Philippine Islands (*E. M. Ledyard*), Brit. Mus., 1925—491.

I take this insect to be the female of Emery's subspecies *subnitida*, the workers of which have been recorded from the Philippines. The yellowish testaceous ground-colour, the texture, sculpture, etc., being the same.

Emery described it from New Guinea, and it has also been taken in the Mollucas and Solomon Islands.

Polyrhachis bihamata Drury.

♂. The whole body of a testaceous colour, the head, thorax and scapes being somewhat darker; the gaster, petiole, legs and funiculi somewhat lighter, yellowish. Body furnished with outstanding yellow hairs, more abundant towards apex of gaster. Sculpture of a very fine, close, coriaceous nature. Head posteriorly and thorax rather dull, clypeus, petiole and gaster shining.

Head longer than broad, narrowed behind eyes, posterior angles blunt, posterior border almost straight; *cheeks* parallel; *mandibles* rather long, triangular, pointed at apex, *masticatory border* unarmed; *clypeus* large,

broad, triangular, anterior border rounded, carinate in centre; *frontal area* indistinct; *frontal furrow* very narrow and shallow, extending to median ocellus; *eyes* very large and prominent, situated towards back of sides of head; *ocelli* large, prominent, situated on top of back of head; *antennæ* 13-jointed, long, slender, filiform. *Thorax* longer than broad, narrowed anteriorly and posteriorly, broadest just before insertion of anterior wings; *pronotum* transverse, narrow, anterior border narrowly, but sharply, margined, posterior border encircling the mesonotum; *mesonotum* long, convex in front, rather flat on dorsal surface, with two narrow, very shallow lines close together, which converge and meet on the dorsal surface and continue as a very narrow, shallow furrow, extending to posterior border of mesonotum; *mayrian furrows* wanting; *parapsidal furrows* very narrow and shallow; *præscutellum* transverse, very narrow in centre; *scutellum* convex and prominent; *metanotum* transverse and narrow; *epinotum* longer than broad, evenly rounded, without an angle between dorsal surface and declivity; *node of petiole* low, rounded, concave on anterior surface and, except in centre of upper surface, posterior surface rounded; *gaster* long, oval, narrowed in front and behind, broadest at base of second segment; *cerci* present; *genitalia* projecting, *stipites* long and pointed. *Legs* long, slender. *Wings* pale yellow, *veins* and *pterostigma* brighter yellow, type *Formica*; *radial cell* long, longer than cubital cell, closed.

Long. 10.5 mm.

♂ type in Brit. Mus. Coll.

Described from a single male labelled "Dukhun, ex coll. Sykes."

As far as I am aware, no male belonging to the subgenus *Polyrhachis* of *Polyrhachis* has been described. Emery, in the 'Genera Insectorum,' clxxxiii. p. 182 (1925), gives under *P. (P.) bihamata* Drury "Forel in Grandidier, Hist. Nat. Madagascar, vol. xx. 2, p. 78 (1861), ♀♀♂♂," but on looking the record up one finds that Forel writes "♂ inconnu"! (Of course, as Forel mentions, *P. bihamata* has never been found in Africa, nor in Madagascar.)

Nylanderia iridescens, sp. n.

♀. Brown, tarsi and palpi yellowish, whole body very finely and delicately shagreened, and with a strong

violet metallic reflection ; clothed with sparse scattered outstanding hairs or bristles (*machæritæ*), more numerous on gaster, no outstanding hairs on legs or antennæ.

Head longer than broad, slightly narrowed in front and behind, broadest about middle, posterior angles bluntly rounded, posterior border straight ; *mandibles* long, narrow, masticatory border armed with three small sharp teeth, the apical one being considerably the longest ; *clypeus* transverse, convex, anterior border broadly rounded ; *frontal area* not defined ; *frontal furrow* very faint, short ; *eyes* large oval, only slightly convex, situated above the centre of sides of head ; *antennæ* long, slender, *scapes* extending about a quarter of their length beyond posterior border of head, *funiculus* with very small short second joint, about as broad as long, rest of joints longer than broad, 3 to 6 subequal, 7 to 10 very slightly longer, last joint about as long as the two preceding taken together. *Thorax* longer than broad, constricted in middle, broadest across the pronotum, in profile the mesonotum is higher than pronotum and epinotum ; *pronotum* transverse, anterior angles rounded ; *mesonotum* convex, slightly longer than broad ; *metanotal spiracales* small, not prominent ; *epinotum* with narrow *dorsal surface* rounded into long flat *declivity* ; *scale of petiole* rather thick, inclined forwards, anterior surface concave, posterior surface convex, upper margin narrow, rounded ; *gaster* short, oblong oval, broadest before middle, tip sharply pointed, first segment with a concavity for the reception of the scale.

Long. 2 mm.

Type in Brit Mus. Coll.

Described from six workers taken under stone, Philippine Is., Luzon, "Convent" Valley, Baguio, Dr. A. Moore, 14. ii. 20. Brit. Mus., 1922—101.

This species belongs to Emery's group with two pairs of macrochetes on the pronotum, one pair on the mesonotum, and one pair on the epinotum, which includes *albipes* Emery, *aseta* Forel, *caledonica* Forel, *foreli* Emery, *lecanopterides* Donisthorpe, *minutala* Forel, *opaca* Emery, and *pusillima* Emery. No species of *Nylanderia* appears to have been recorded from the Philippines heretofore.