

PROCEEDINGS
OF THE
NEW ENGLAND ZOÖLOGICAL CLUB

TWO NEW GENERA OF MYRMICINE ANTS FROM
PAPUA AND THE PHILIPPINES

BY WILLIAM MORTON WHEELER

ANCYRIDRIS¹ gen. nov.

Worker: Monomorphic (?), with hard, thick, smooth integument. Mandibles subtriangular, with distinct and rather long masticatory border bearing a graduated series of about 10 teeth. Palpi short, maxillary pair 4-, labial pair 3-jointed. Head broadly subelliptical, eyes well developed, in front of the middle of its sides; ocelli absent. Clypeus very short laterally, with subobsolete posterior suture, its median portion produced backward triangularly between the frontal carinae, its anterior border with a large, median triangular tooth. Frontal carinae rather closely approximated, feebly lobular in front, straight and subparallel behind; frontal area absent; frontal groove interrupted, subobsolete. Antennae long, 12-jointed; first funicular joint somewhat enlarged, second longer than the third, the tip enlarged, forming an indistinct three- to four-

¹ From *ἄγκυρος*, an anchor, and *ἰδρίς*, the "knowing or provident one," Hesiod's name (*Works and Days*, verse 778, in the text adopted in the Loeb Classical Library) for an ant, probably *Messor barbarus* or *structor*. I would suggest that 'idris' might be used to advantage as a combining form in some future generic names of ants, instead of 'myrmex' and 'myrma' which have been somewhat overworked.

jointed club. Thorax long and narrow, shaped somewhat as in *Aphaenogaster*, with long and pronounced mesoepinotal impression; promesonotal suture distinct only on the sides, mesoepinotal suture obsolete; pronotum with strong humeral protuberances; mesosternum with a rectangular, laterally projecting tooth near the base of its ventral border; epinotum bearing two long, flattened, hooked spines resembling those of *Polyrbachis bamata* Drury; epinotal spiracle circular, borne on a distinct crateriform eminence; metasterna swollen, apparently containing voluminous metasternal glands. Petiole long, with well-developed anterior peduncle, its node rather high and bearing a pair of backwardly and outwardly directed spines. Postpetiole short, with rounded-subconical node. Gaster broadly oval, consisting for the most part of the enlarged first segment; sting not exerted, apparently vestigial. Legs long; coxae large and swollen; middle and hind tibiae spurless; tarsal claws simple.

Genotype: *Ancyridris polyrbachioides* sp. nov.

Ancyridris polyrbachioides sp. nov.

Worker: Length nearly 6 mm.

Head slightly longer than broad, slightly narrower in front than behind, evenly convex above, with convex posterior border, rounded sides and posterior corners, the latter marginate inferiorly. Antennal foveae large, confluent with the clypeal foveae. Eyes elongate-elliptical, somewhat pointed anterio-inferiorly, moderately convex, situated about twice their length from the anterior corners of the clypeus. Mandibles convex, with straight external borders, their masticatory borders with three stout apical, and six or seven smaller and blunter basal, teeth. Antennae slender; scapes nearly straight, distinctly thickened toward their tips, which extend about one fifth their length beyond the posterior border of the head; first and second funicular joints nearly twice as long as broad, 3d-6th proportionally shorter, 7th-9th, again, longer and broader, the enlarged terminal joint as long as the preceding two together. Thorax fully three times as long as broad, broadest through the pronotum, which, however, is narrower than the head, with convex, swollen sides, its dorsal portion rising rather steeply from the stout neck and forming an evenly but not strongly convex, trapezoidal plate, slightly broader than long and slightly broader in front than behind, with straight, anteriorly submarginate sides, its anterior or

humeral angles produced as thick, blunt projections, its posterior corners subrectangular, small but distinctly projecting beyond the lateral border of the mesonotum. Mesonotum in profile rounded and sloping, continuing the even convexity of the pronotum, from above broader than long. Epinotum longer than broad, broader behind than in front, its base straight

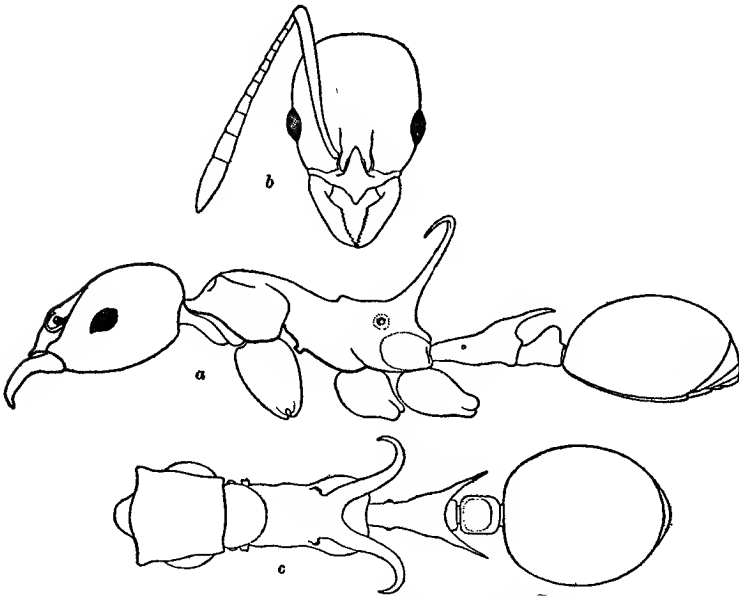


Figure 1. *Ancyridris polyrhachioides* sp. nov.
Worker: *a*, lateral aspect; *b*, head, dorsal aspect; *c*, thorax and pedicel, dorsal aspect.

and horizontal, rising slightly and abruptly at its anterior end above the mesoepinotal impression, decidedly longer than the sloping concave declivity. The large epinotal spines are stout at the base, directed outward, upward and backward, with their flattened apical thirds turned downward, laterally and forward. Petiole about three times as long as broad, broader behind at the node than in front, the sides nearly straight, except for the projecting spiracles on the peduncle, in profile with the dorsal surface of the

latter nearly straight, gradually sloping upward to the node, which is half as high as the length of the petiole, abruptly descending behind to a short posterior peduncle. The spines into which the node is produced are as long as its height, rapidly tapering, acute, directed outward and backward and curved almost imperceptibly downward. Postpetiole slightly broader than the petiole, about one and one-third times as broad as long, its nodal portion square from above, in profile subconical, lower than the petiolar node, its anterior slope straight, longer than the more abrupt and distinctly concave posterior slope. Gaster scarcely larger than the head, the first segment, which is evenly convex, in dorsal view almost concealing the small posterior segments, its anterior border semicircular, not concave at the insertion of the postpetiole.

Smooth and shining; mandibles, clypeus, except its posterior median portion, lobes of frontal carinae and anterior third of head more subopaque and finely granular, the mandibles also coarsely and sparsely punctate; front on each side with about ten rounded, costa-like longitudinal rugae, which are longest just above the eyes; cheeks and gula on each side with similar but less pronounced rugae. Legs, prosterna and anterior portion of neck less shining than the thorax, densely granular; coxae, petiole and postpetiole more superficially granular or shagreened. Gaster highly polished, with very minute and very sparse, piligerous punctures.

Hairs yellowish, almost lacking on the body, short on the mandibles, longer on the terminal gastric segments, first gastric segment with very short, sparse, appressed hairs or pubescence. Similar but longer appressed hairs occur on the femora, but their tips and the tibiae, especially on their flexor surfaces, bear long, sparse, rather delicate suberect hairs, which become coarser, shorter, stiffer and more oblique on the tarsi. Scapes and funiculi with sparse rather oblique, stiff hairs which are shorter than those on the tibiae. Each of the humeral protuberances of the pronotum bears a singular, very long, delicate, lash-like hair, and there is a similar hair on each side of the median line near the posterior end of the pronotum.

Black; mandibles, insertions of scapes, three terminal funicular joints, neck, prosterna, tarsi and tips of epinotal and petiolar spines red; scapes, bases of mandibles, femora and tibiae darker, brownish red; dental borders of mandibles dark brown; mouth parts yellowish.

Described from two somewhat damaged specimens belonging to the Museum of Comparative Zoölogy. They were found by Mr. James Greenway in the stomach of a flycatcher (*Poecilodryas cyanea subcyanea* De Vis) taken during 1932 by Mr. H. Stevens on Mt. Misim in the Morobe District of New Guinea (Papua).

Apart from the curious and unmyrmicine spines on its epinotum and petiole, this ant bears a general resemblance to *Aphae-*

nogaster or certain worker forms of Pheidole, but there are several structural characters, like the median tooth of the clypeus, the peculiar, laterally directed tooth on the mesosterna, and the large size of the coxae and first gastric segment, which suggest that we are dealing with a representative of some aberrant and archaic group, another of the living fossils which are continually turning up in the Papuan and Australian Regions. Provisionally, at least, *Ancyridris* may be placed in Emery's tribe Pheidolini. There is, of course, a possibility, as in the case of Mayr's genus *Ischnomyrmex*, that the specimens on which I have based the genus, are minor workers, and that there exists a large soldier form, still to be discovered. It will be recalled that *Ischnomyrmex longicollis*, though described from workers by Frederick Smith as long ago as 1857, was not known to have a huge-headed soldier caste till 1913, when it was described by Forel for the var. *conicollis* Emery. The long hairs on the pronotum of *Ancyridris* are very peculiar. Perhaps other unusual portions of the pilosity have been removed by the action of the gastric juices of the bird in which the specimens were found.

ROMBLONELLA gen. nov.

Worker: Monomorphic, stout and thickset; integument hard, thick, very coarsely sculptured. Head subrectangular, with moderately large, convex eyes at the middle of the sides. Ocelli absent. Mandibles short, subtriangular, with strong, subequal teeth. Clypeus short and depressed on the sides, with broad, antero-posteriorly convex median portion, extending back between the frontal carinae, the anterior border without teeth. Frontal carinae widely separated, somewhat lobular and horizontal anteriorly, continued back to within a short distance of the posterior corners of the head as a pair of sharp, diverging ridges which form the mesial borders of distinct but shallow scrobes. Frontal area distinct but shallow; frontal groove absent. Antennae short, 12-jointed; funiculi enlarged toward the tip, forming a very distinct 3-jointed club which is as long

as the remainder of the funiculus, first funicular joint enlarged, nearly twice as long as broad, joints 2-8 short and transverse. Thorax stout, evenly convex above, without promesonotal and mesoëpinotal sutures. Epinotum armed with a pair of long spines, which are placed rather low. Petiole and post-petiole very large, nodiform, the former narrowed and subpedunculate anteriorly. Gaster broadly elliptical, formed very largely by the first segment. Sting small. Coxae small, legs stout, middle and hind tibiae spurless; tarsal claws simple.

Genotype: *Romblonella grandinodis* sp. nov.

This genus is to be assigned to Emery's tribe Meranoplini. Its relationships to the known genera are indicated in the following table for the identification of the workers.

Genera of Meranoplini

1. Mesonotum large, dominating the epinotum, furnished at its posterior border with teeth or other appendages. 2
 Mesonotum less developed, unarmed at its posterior border. 3
2. Promesonotum strongly marginate; antennae 9-jointed.
 *Meranoplus* F. Smith
 Promesonotum not marginate; antennae 12-jointed.
 *Promeranoplus* Emery
3. Frontal carinae not forming the mesial borders of scrobes for the antennae. 4
 Frontal carinae prolonged posteriorly to form the mesial borders of pronounced scrobes. 5
4. Antennae 11-jointed; petiole unusually large, nodiform.
 *Willowsiella* Wheeler
 Antennae 12-jointed; petiole squamiform, not enlarged.
 *Prodicroaspis* Emery
5. Minute species, less than 2 mm. long; antennae 10-jointed.
 *Mayriella* Forel
 Decidedly larger species; antennae 11- 12-jointed. 6
6. Mesoëpinotal suture obsolete; epinotum armed with long spines; petiole and postpetiole unusually voluminous.
 *Romblonella* gen. nov.
 Mesoëpinotal suture distinct; epinotum unarmed or dentate; petiole and postpetiole not enlarged. 7

7. Antennae 12-jointed.....*Calyptomyrmex* Emery
 Antennae 11-jointed..... 8
8. Anterior clypeal border bidentate; head subtriangular,
 narrowed anteriorly.....*Dicroaspis* Emery
 Clypeal border not dentate; head as broad in front as behind.
*Geognomicus* Menozzi

Romblonella grandinodis sp. nov.

Worker: Length 4 — 4.5 mm.

Head as broad as long, subquadrate, slightly broader behind than in front, with broadly and feebly concave posterior border, rounded posterior and anterior corners and rather straight sides. Eyes oval, rather convex, antero-inferiorly angular or bluntly pointed, situated about twice their length from the anterior corners of the clypeus. Mandibles stout, convex, with rounded external borders, the masticatory borders armed with six stout, but rather blunt, subequal teeth. Anterior clypeal border sinuate at the sides, in the middle with broad, straight and slightly projecting lobe. Frontal area rather large, triangular, rugulose. Antennal scapes about twice as long as the distance of their tips from the posterior corners of the head, curved at the base and not quite reaching the ends of the scrobes. First funicular joint nearly twice as long as broad, joints 2 - 8 nearly twice as broad as long, 9 and 10 subequal, distinctly longer than broad, together equalling the more enlarged terminal joint. Thorax about two and one-half times as long as broad, broadest through the pronotum, its dorsal outline in profile evenly convex; pronotum broad, slightly broader in front than behind, rising rather abruptly from the strong neck, with rectangular humeri and similar but blunter posterior angles at its lateral junctions with the mesonotum. Mesonotum distinctly concave at the sides, as long as the base of the epinotum which is shorter than the steep, concave declivity, the spines somewhat longer than their distance apart at the base and as long as the epinotum, directed backward and outward and distinctly curved inward. Being somewhat flattened dorso-ventrally, they appear more tapering and more acute in profile than when seen from above. Metasternal lobes distinct. Petiole nearly two thirds as broad as the epinotum, about one third longer than broad, broader behind than in front, where it is subrectangular, with the sides rounded behind; in profile it is nearly as high as long, with an acute antero-ventral tooth and the node, which is as high as the epinotum, strongly rounded-cuboidal, from above more hemispherical. Postpetiole about one third broader than the

petiole, nearly twice as broad as long, elliptical and strongly convex but lower than the petiolar node. Gaster about as large as the head, broadly and regularly elliptical, anterior border of first segment concave. Femora incrassated in the middle, tibiae stout and clavate.

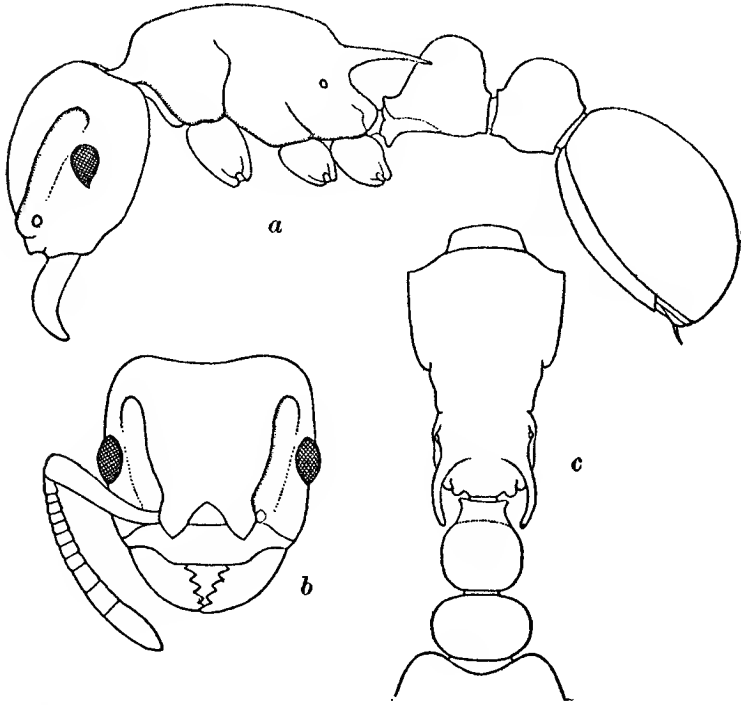


Figure 2. *Romblonella grandinodis* sp. nov.
Worker: *a*, lateral aspect; *b*, head, dorsal aspect; *c*, thorax and pedicel, dorsal aspect.

Subopaque; mandibles, antennae, coxae and legs distinctly shining. Mandibles coarsely longitudinally striate and sparsely punctate; remainder of body very finely and sharply reticulate, with the minute spaces between the reticulations shining under a high magnification and with the following superimposed rugosity: Head reticulate-rugose, the main rugae between the frontal carinae and on the broad median portion of the clypeus regular

and longitudinal; scrobes reticulate, crossed by a few delicate rugules and bounded laterally by a longitudinal ruga; occiput, cheeks and sides of head more coarsely reticulate-rugose. Neck coarsely reticulate, thoracic dorsum reticulate-rugose, very coarsely on the pronotum, less sharply and less regularly on the mesonotum and base of epinotum; meso- and metapleurae, especially below, longitudinally rugose; declivity of epinotum sharply reticulate; nodes of petiole and postpetiole even more coarsely reticulate-rugose than the pronotum; gaster sharply but minutely reticulate throughout; scapes and legs with similar but less pronounced sculpture.

Pilosity glistening white, moderately abundant, short, coarse, obtuse, erect, even and uniformly distributed over the body and appendages, somewhat longer on the abdomen than on the head and thorax, more oblique on the legs, on the antennae somewhat finer, suberect on the scapes, subappressed on the funiculi. Pubescence undeveloped.

Brown-black or very dark brown; mandibles, antennae and legs, including the coxae, and tip of gaster slightly paler, castaneous; tarsi more reddish.

Described from four specimens taken May 6, 1928, by Señor L. Marato on Romblon Island, Philippines, and received from Dr. J. W. Chapman.