

SOME NEW AND INTERESTING PHILIPPINE ANTS  
(HYMENOPTERA: FORMICIDÆ)

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SOME NEW AND INTERESTING PHILIPPINE ANTS  
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EIGHT TEXT FIGURES

This paper lists the known species of the genus *Ænictus* found in the Philippines and describes three new species of the subgenus *Ænictus* (*Ænictus*) Wheeler, and the male of *Ænictus* (*Typhlatta*) *martini* Forel (undescribed), as well as several new species of other genera which I am happy to include in the present report. Most of these species were taken on the Cuernos de Negros Mountains, Dumaguete City, Oriental Negros Province, Philippines.

*Measurements cited.*—In studying the taxonomy of the workers of *Ænictus* I found that certain specific measurements, such as used by Brown (1949)<sup>1</sup> and Wilson (1957),<sup>2</sup> were reliable and helpful in separating the different species.

Subfamily DORYLINÆ Leach

Tribe ÆNICTINI Ashmead

Genus ÆNICTUS Shuckard

1. ÆNICTUS (ÆNICTUS) PHILIPPINENSIS sp. nov.

Fig. 1.

*Worker.*—Total length without mandibles, 4.06 mm. Head length, 0.89 mm; head width, 0.81 mm; head depth, 0.63 mm; length of scape, 0.63 mm; length of alitrunk (Comstock), 1.25 mm; cephalic index, 91.

<sup>1,2</sup> Head length, head held in perfect full face, measured from the most anterior point of the clypeus border to the mid-occipital border; head width, the maximum width of the head held in full face, excluding the eyes; head depth, measured from lateral view from the front to the lowest point on the gula; length of scape, maximum length of the scape excluding the basal neck; length of alitrunk (Comstock), measured from the anterior border of the pronotum to the articulation with the petiole; node height, petiolar height, the full height from the crest of the node to the lowermost point of the subpetiolar process; node width, the widest part of the node measured from directly above; cephalic index, head width at its widest point expressed as a percentage of head length (head width,  $\times 100$  / head length). In males the width across the head may include the eyes.

Head slightly longer than broad, sides feebly convex, posterior border straight, with rounded corners. Front and genal carinae short, each ending in a short tooth in front. Clypeus border narrow, bearing a row of projecting hairs. Mandibles triangular, with oblique apical borders and small basal teeth, terminating in long, curved apical teeth. Antennae short, scape reaching posterior fourth of head. First point of funiculus longer than broad, 2 to 7 broader than long, the last joint longer than the two preceding together. Thorax in profile with a transverse furrowlike depression separating mesonotum from propodium. Base of propodium slightly convex forming a right angle at declivity, which is slightly marginate along sides.

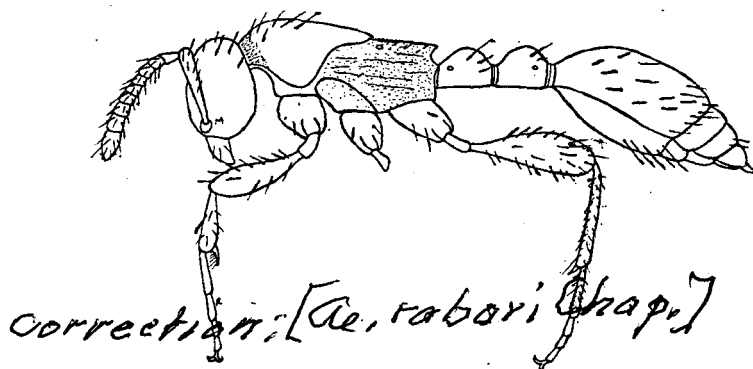


FIG. 1. *Aenictus* (*Aenictus*) *philippinensis* sp. nov.; worker.

Petiole longer than broad, slanting upward to rounded dorsal surface, concave behind, ventral surface straight. Node of postpetiole more uniformly rounded above, shorter than petiole, with posterior surface convex, antero-ventral surface extending forward beneath petiole, forming a toothlike projection. Gaster elliptical, legs short with apical half of femora and tibia somewhat swollen. Mandibles finely and longitudinally striate; head, thorax, and node petiole finely and densely punctate. Coxa, femora, tibia, postpetiole, and gaster smooth and shining. Pilosity consisting of short erect hairs on funiculus, tibia, tarsi, with long erect hairs scattered on front of mandibles, thorax, femora, nodes, tergite and sternite of gaster. Mandibles dark red, antennae, head, thorax, and petiolar nodes yellowish red.

Ecological notes: This species was first collected on April 27, 1931, by Dr. Fidel del Rosario, from a foray on the Cuernos de Negros at 1,500 feet altitude. The specimens taken at this time are somewhat darker than those I took on July 29, 1942,

on the Cuernos at 3,600 feet altitude. This foray came from a hole in the ground, climbed up a stump nearby, and spent the next hour building a living pyramid up into the air, while a similar group of workers tried to build out horizontally from the edge of the stump. Time of observation was from 5 p.m. until dark. The next morning I dug around the hole from which they had come but found no trace of their bivouac. However, I collected several hundred workers while watching them during this strange maneuvering on the stump.

2. *ÆNICTUS (ÆNICTUS) RABORI* sp. nov.

Fig. 2.

*Worker*.—Total length excluding mandibles, 4.22 to 4.29 mm. Head length, 0.85 mm; head width, 0.81 mm; head depth, 0.56 mm; length of scape, 0.59 mm; length of alitrunk (Comstock), 1.48 mm; cephalic index, 95.



FIG. 2. *Ænictus (Ænictus) rabori* sp. nov.; worker.

Head scarcely longer than broad, slightly wider in front than behind, sides feebly convex, posterior border straight, with rounded corners. Frontal and genal carinæ short, the latter feebly dentate. Clypeus convex with the narrow border bearing a row of projecting hairs. Mandibles triangular with oblique apical borders bearing strong apical teeth. Antennæ short, scape thickened apically, reaching posterior fourth of head. First funicular joint longer than broad, 2 to 7 broader than long, terminal joint longer than the two preceding together. Pronotum convex in front, slightly flat dorsally, mesonotum forming a right angle with straight base of propodium, and another right angle with declivity, which is feebly marginate on sides. Petiole longer than broad, sloping upward and backward to rounded dorsal surface, posterior surface barely concave, with ventral surface straight. Postpetiole shorter, with a more rounded dorsal surface, anteroventrally a tooth project-

ing forward beneath petiole. Legs seen from side showing extraordinary swollen femora. Mandibles, head, pronotum, coxa, legs, and gaster smooth and shining, excepting border of pronotum, mesopleura, sides of propodium and petiolar node, which are finely and densely punctate. Hairs yellow, uneven in length and sparse on head and thorax, more prominent and numerous on antennæ, appendages, tergite and sternite of gaster. Mandibles reddish brown, antennæ, head, and rest of the body reddish. Terminal joints of funiculus, coxa, legs, and sternites of gaster yellowish.

Ecological notes: Taken July 29, 1943, on the Cuernos de Negros, at 3,600 feet altitude, foraging in our evacuation garden. This species might casually be taken for *philippinensis*, as I did at first, but the greatly swollen femora, smooth head, reddish pronotum, as well as the whole dorsal profile, serve to distinguish it from any of the other *Ænictus* workers I have seen. I dedicate this species to Professor Dioscoro Rabor, head of the Biology Department of Silliman University.

3. *ÆNICTUS (ÆNICTUS) REYESI* sp. nov.

Fig. 3.

*Worker*.—Total length, excluding mandibles, 3.41 mm. Head length, 0.78 mm; head width, 0.74 mm; head depth, 0.48 mm; length of scape, 0.63 mm; length of alitrunk (Comstock), 1.11 mm; cephalic index, 95.

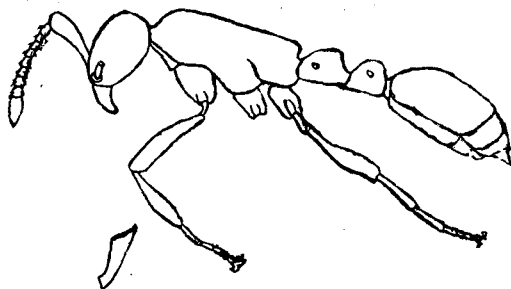


FIG. 3. *Ænictus (Ænictus) reyesi* sp. nov.;  
worker.

Head somewhat longer than broad, slightly wider in front than behind, sides feebly convex, with rounded posterior corners, posterior border straight. Frontal and genal carinæ short, the latter forming a small tooth in front. Clypeus convex at its anterior border, mandibles with oblique dental portion short, with widely separated short teeth, apical teeth small. Antennæ short, scape thickened apically, reaching posterior fourth

of head. First joint of funiculus longer than broad, 2 to 7 broader than long, terminal joint longer than the two preceding together. Dorsal surface of pronotum, mesonotum, and propodium straight and continuous, founded at the declivity, which is slightly concave, petiole as long as high, a little longer than potspetiole, which is evenly rounded dorsally. Gaster elliptical, legs short, with femora enlarged apically.

Head, mid-dorsal surface of thorax and nodes, and gaster smooth and shining. Frontal border of pronotum feebly straited, sides of mesonotum and propodium finely punctate. Hairs white, sparse over the entire body but more numerous on funiculus, tibia, and tarsi. Head and thorax dark brown to black, nodes, funiculus and legs reddish brown, the last joint of funiculus yellow beneath.

This species closely resembles *punensis* Forel, taken at Poona India, and described in 1901; specimen of which, minus the postpetiole and gaster, is in the Museum of Comparative Zoology at Harvard University. *Punensis* is more reddish yellow than the specimens I have before me. Described from 20 workers taken from a foray on the Cuernos de Negros, February 20, 1931. Mr. Alfredo Reyes, of the Biology Department of Silliman, has contributed greatly to our knowledge of Philippine ants through his collecting in the mountains near Ginoog, Oriental Misamis, Mindanao while a teacher of biology in the high school there.

4. *ÆNICIUS* (*TYPHLATTA*) *MARTINI* Forel. Male (hitherto undescribed). Fig. 4.

Male.—Total length, 9.62 mm. Head length from articulation border to tip of the clypeus, 1.37 mm; head width through eyes, 1.67 mm; length of scape, 0.67 mm; length of mandibles, 1 mm; length of alitrunk (Comstock), 2.44 mm; node width, 1.11 mm.

Head through eyes broader than long, front slightly hollowed out, cervical border strongly convex, clypeus straight, anterior border bilobed. Compound eyes large, situated at extreme front angles of head, longer than broad, ocelli large, median ocellus a little anterior to vertex, than the lateral ones. Mandibles more than twice as long as broad, flat, broadest near base, and curved inward. Antennæ with thirteen joints, scape compressed at distal half and reaching medial ocellus. Funiculus fusiform, first and second joints short, 3 to 11 subequal, terminal as long as the two preceding together. Thorax broader

than head, pronotum short and convex. Mesonotal border horizontal and twice as long as broad, scutellum prominent, propodium vertical and slightly concave, node broader than long, with lateral borders raised and convex, superior surface concave, ventral surface prolonged into a strong keel. Anterior surface convex, posterior concave. Legs short, femora compressed throughout, tibia and first joints of tarsi incrassate.

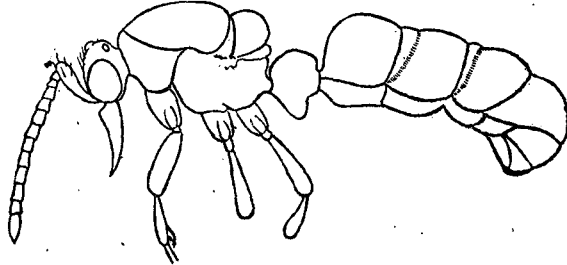


FIG. 4. *Aenictus* (*Typhlatta*) *martini* Forel; male undescribed.

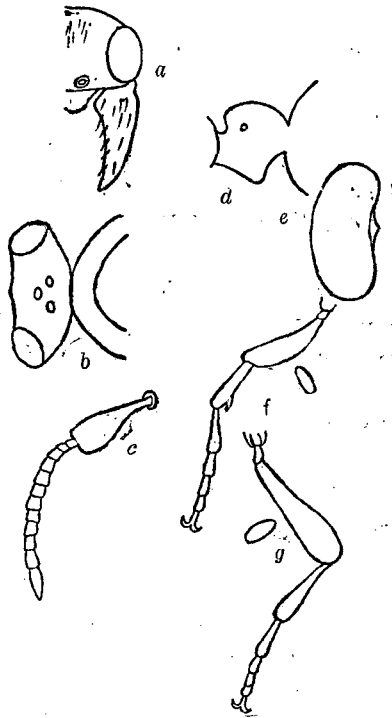


FIG. 4. *Aenictus* (*Typhlatta*) *martini* Forel (undescribed): *a*, front view of head; *b*, dorsal view of head; *c*, antennæ; *d*, side view of petiole; *e*, dorsal view of petiole; *f*, section of foreleg; *g*, section of posterior leg.

Wing veins brown, surface transparent and iridescent. Gaster longer than alitrunk, with anterior border of the tergite forming a crescent-shaped, raised, smooth area in all the *martini* males examined. Smooth and shining throughout.

Thorax, node, and gaster covered with short appressed hairs. Mandibles, scape, front of head and lateral border of occipital region, femora, and tibia with scattered erect hairs.

Color brown, occipital portion black, mandibles, scape, and legs red.

Described from three winged males, taken from a foray of workers leaving a statory phase of their life cycle, on May 29, 1934. They lay coiled up motionless as they were dragged by the workers. Their queen was also taken at this time. Twelve males, wingless, were taken from another colony on June 6, 1947. They were scattered along the foray with the workers. Twenty-seven males have been taken at lights over the years, only one of which was described. *Ænictus bakeri* Menozzi was taken by Dean C. F. Baker at lights at Iligan, Mindanao. List of males and distribution is given at the end of this paper. This is the first record in *Ænictus* in which the workers, females, and males are known, as the males cannot be coordinated with the other castes unless taken together.

##### 5. *ÆNICTUS (ÆNICTUS) PAPUANUS* Donisthorpe.

This species, described by Donisthorpe from New Guinea, belongs to the *turneri* Förel group, a small, reddish-yellow or yellowish red group. I have not seen the type of *papuanus*, but have before me several specimens of *papuanus* collected by Dr. E. O. Wilson in New Guinea, and compared by him with the types in the British Museum. One of my collections in the Manapla Mountains, Occidental Negros, December 23, 1935, of specimens of *Ænictus (Ænictus)* sp. Wheeler, is so close to *papuanus* in color and measurements, that I am tentatively referring it to *papuanus*.

##### 6. *ÆNICTUS (ÆNICTUS)* sp.

*Ænictus* workers from three other collections are also related to the *turneri* group. One was made on July 30, 1930, on the Cuernos de Negros, at 1,500 feet altitude; the second on August 7, 1943, at 3,600 feet altitude; the third, at 1,500 feet altitude on April 19, 1949. I am unable to place any of these workers with either *turneri* or *papuanus*, as they are somewhat larger



and differ in several other respects sculpturally. I leave them to be resolved when the genus of *Ænictus* is revised, as I hope it will be done very soon.

Subfamily PONERINÆ Lepeletier

Tribe PONERINI Forel

Genus HARPEGNATHUS Jerdon

7. HARPEGNATHUS EMPESOI sp. nov.

Fig. 5.

*Worker*.—Total length without mandibles, 12.02 mm. Head length, 2.6 mm; head width through eyes, 2.11 mm; behind eyes, 1.85 mm; head depth, 1.85 mm; length of mandibles, 3.7 mm; length of scape, 2.41 mm; length of alitrunk (Comstock), 4.62 mm; length of node, 1.11 mm; cephalic index, 80.

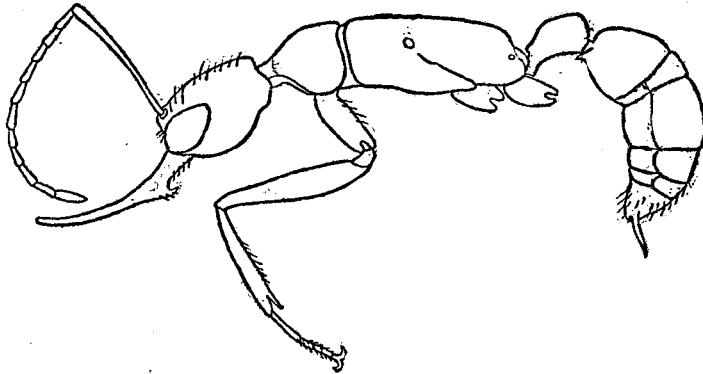


FIG. 5. *Harpegnathus empesoi* sp. nov.; worker.

Eyes very large, 1.29 mm long, situated at anterior lateral angles of head, vertical length, 0.93 mm, median ocellus small, situated 1.11 mm from occipital border. Clypeus slightly convex, anterior border straight, with a small projection of middle line. Frontal area present, but small. Frontal carinae covering base of scape. Mandibles long, separated at base, but approximate, acutely curved upward, and tapering toward tips, and finely serrated on their inner border. Each provided a short distance from their base with a large flat triangular tooth, projecting inward and somewhat downward and backward so that their tips overlap. Antennae filiform, joints 1 to 10 subequal, apical joint as long as the two preceding together.

Alitrunk long and slender, premesonotal suture prominent, mesopropodial suture obsolete. Propodium declivity oblique, node long, higher behind than in front, rounded in front, sides convex. Head with parallel longitudinal wrinkles, smoothing out on sides. Mandibles smooth, pronotum wrinkled like the head, but becoming transverse on the propodium and indistinct

on the node. Gaster smooth and shining. Few erect hairs on clypeus, more scattered over front of head, with short hairs on propodium, last segment of gaster, posterior surface of coxa, with fine hairs on tarsi. Head, antennæ, alitrunk, node and gaster reddish yellow. Mandibles and legs more yellowish.

Ecological notes: One specimen was taken by Domingo Empeso, at Soco, Dapitan, Mindanao, in 1947. The worker was crawling on the ground very near a large rotten log. He searched for others but did not find any. A few weeks later he flew back to break open the log. Farmers in the meantime had cut all the brush and piled it on the log and burned it.

This is a most striking ant. Two other species have been reported from workers in the Philippines: *rugosus* Mayr, from Mount Makiling (Coll. Baker), and *macgregori* Wheeler and Chapman, from Biliran (Coll. MacGregor). A male, *mediogiger*, described by Donisthorpe in 1942, was collected on Mt. Banahao, in 1924, by Baker. None of these resemble *empesoi* in any way, except in size.

Subfamily MYRMECINÆ Lepeletier

Tribe PHEIDOLINI Emery

Genus PHEIDOLE Westwood

8. *PHEIDOLE FANTASIA* sp. nov.

Figs. 6a-c.

*Major workers*.—Total length, 2.78 mm. Head length, 1.04 mm; head width, 0.93 mm; head depth, 0.56 mm; length of scape 0.41 mm; length of alitrunk (Comstock), 0.81 mm; cephalic index, 89.

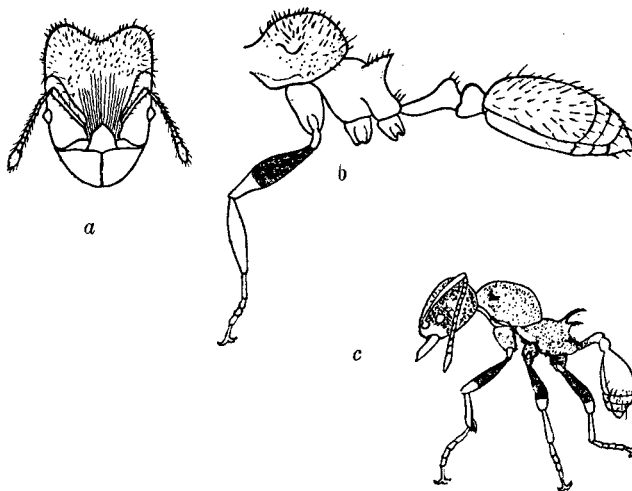


FIG. 6. *Pheidole fantasia* sp. nov.; a, front view of head of major worker; b, side view of major worker; c, side view of minor worker.

Head longer than broad, sides moderately straight, posterior border deeply incised, corners rounded. Mandibles short, stout, dental area finely toothed, with blunt apical teeth. Clypeus concave, anterior border straight, frontal carinæ raised, diverging to tip of scape, forming a short scrobe, reaching to transverse middle of head. Eyes small, almost flat, and consisting of about 12 ommatidia, situated at sides of anterior third of head. Pronotum and mesonotum gibbous in profile, pronotum angularly produced at sides, mesopropodial impression strong, base of the propodium as long as declivity, both concave, spines short, laterally flat and triangular in profile, diverging at their tips. Petiole peduncle long, when raised it fits between spines of propodium. Postpetiolar node twice as broad as long. Gaster flat dorsoventrally, transverse in front, slightly longer than broad. Mandibles and clypeus smooth and shining, genæ with blunt teeth, vertex and occipital border of head finely rugose-striate, more clearly defined between frontal carinæ, scrobes finely punctate. Thorax granular, peduncle, nodes of petioles smooth and shining. Hairs gray, scattered over entire body, more abundant on gaster, legs, and funiculus. Mandibles and the transverse narrow band around front of head, including clypeus, frontal carinæ, genæ, reddish; rest of the head reddish brown; antennæ ivory-white, thorax, like the head, apical part of femora, tibia, tarsi yellowish white. Gaster brown, with tip white.

*Minor worker*.—Length, 1.74 to 1.81 mm. Head length, 0.51 mm; head width, 0.44 mm; head depth, 0.30 mm; length of scape, 0.55 mm; length of alitrunk (Comstock), 0.55 mm; cephalic index, 86.

Head longer than broad, feebly concave at posterior border which is rounded at the corners. Mandibles with long verticils dentate border, with rows of evenly spaced basal teeth and strong apical teeth. Frontal carinæ short, flat; clypeus rounded in front; eyes situated anterior to transverse median line of head. Scape reaching beyond occipital border, first joint of funiculus very long, club three-jointed. Pronotum broader than long, convex above; humeral angles forming blunt projections. Promesonotal impression weak, showing best at sides; base of propodium convex, as long as declivity which is concave. Spines long and slender, diverging outward, backward and downward, enfolding nodes of petioles. Petiole node broader than long, postpetiole twice as broad as long. Gaster elliptical and longer than broad. Head, thorax finely granulated; mandibles, petiolar nodes, and gaster smooth and shining. Mandibles, cly-

peus, frontal carinæ, fossa, genæ, antennæ ivory-white; nodes of petioles, gaster, apical part of femora, tibia and tarsi white; posterior part of head, thorax, peduncle of petiole, coxa, and part of femora brown.

*Female*.—Total length, 3.22 mm. Head length, 0.93 mm; head width, 0.81 mm; head depth, 0.55 mm; length of scape, 0.45 mm; length of alitrunk (Comstock), 1.18 mm; cephalic index, 88.

Head with mandibles longer than broad, sides slightly curved, occipital border feebly concave, corners rounded. Frontal carinæ raised in front, diverging toward corners of head and forming marked scrobes, scape reaching posterior fourth of head. Mandibles short, stout, lacking prominent individual teeth. Eyes large, situated at transverse middle of head, ocelli prominent. Dorsum of pronotum flat, base of propodium forming a concave declivity, the short stout spines are broad at the base. Petiole and postpetiole nodes broader than long. Gaster, as in the major worker, a little longer than broad. Head, thorax, nodes, and gaster like those of the major workers; mandibles, clypeus smooth and shining; scrobes finely punctate;

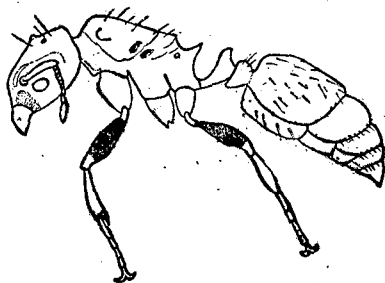


FIG. 6. *Pheidole fantasia* sp. nov.;  
female.

legs and ~~mandibles~~ of the petiole smooth and shining. Head, thorax, ~~nodes~~ gaster with sparse erect whitish hairs, dorsal surface of ~~nodes~~ with golden hairs. Color of mandibles and anterior part of head as in major workers. Thorax dark-brown to black; legs, reddish brown, with apical part of femora, tibia and tarsi, and tip of gaster white.

Ecological note: Workers of this species were found crawling on a log which I was cutting up for firewood during the war. The log came from a reserve pile, saved when we cleared the ground around our evacuation house in the forest. It was fully

a year after these few specimens were found that I discovered the colony in a knot-hole in one of the large logs. The small worker ants are fantastic in appearance. The posterior part of the head and thorax are dark brown; the antennæ, mandibles, front of the head, nodes, gaster and a large part of each leg are without pigment, or at least an ivory white. The colony was small, and consisted of broad, workers, minor and major, and several females and males. They were preserved in commercial alcohol and hidden in a pressure cooker in a hollow tree. They were brought down to Dumaguete by the soldiers of General Eichenberg when this city was reentered in 1945. The males were misplaced, but the rest of the material is in fairly good shape. The specimens are somewhat discolored on account of the molasses still in the alcohol, so, they are not as bright as before.

Subfamily FORMICINÆ Lepeletier

Tribe CAMPNOTINI Forel

Genus POLYRHACHIS Fr. Smith

**POLYRHACHIS (ANOPLYMYRMA subgen. nov.)<sup>3</sup> PARABIOTICA sp. nov.** Figs. 7a-d.

*Worker*.—Total length, 6.28 mm. Head length, 1.55 mm; head width, 1.36 mm; head depth, 1.11 mm; length of scape, 1.85 mm; length of alitrunk (Comstock), 2.22 mm; petiolar height, 0.85 mm; cephalic index, 88.

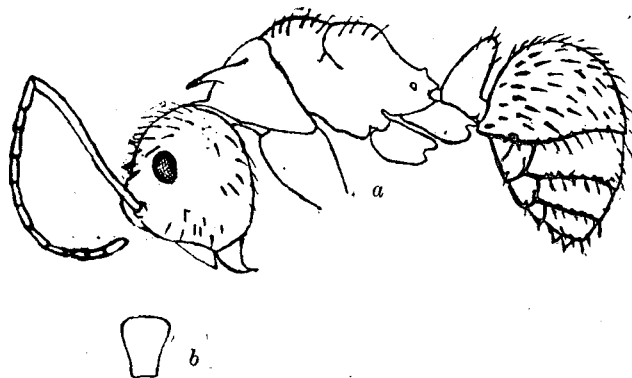


FIG. 7. *Polyrhachis (Anoplomyrma) parabiotica* sp. nov.;  
a, worker; b, front view of petiole.

Head a little longer than broad, sides in front of eyes barely curved, posterior border uniformly rounded. Clypeus convex, anterior border convex, with a marked projection at anterior

border. Frontal carinæ not greatly separated, diverging slightly behind and parallel posteriorly. Eyes convex and situated well toward posterior corners of head. Pronotum with rounded sides, about as broad as long, broader in front, with well developed humeral spines pointing forward and outward. Mesonotum convex, with a transverse depression at border of mesopropodium, base of propodium convex, rounded at declivity, which is concave and without spines. Petiolar node high, convex in front and almost flat behind, its superior surface rounded anteroposteriorly and slightly angulate. Gaster small, elliptical with anterior feebly concave, anterior border of each tergite forming a narrow transverse brown band. Smooth and shining throughout. Covered with long erect hairs on scape, sides of head, thorax, and node of petiole, but not so dense on the legs. A deep golden pubescence on the funiculus, parts of the head, thorax, node, gaster, and the legs. Yellowish red throughout. Head and thorax a little darker than gaster and legs. Color and pilosity closely resembling that of *Myrmecaria brunnea* subsp. *carinata* Fr. Smith, with which it has always been found associated.

*Female (dealated).*—Total length, 7 mm. Head length, 1.63 mm; head width, 1.48 mm; head depth, 1.29 mm; length of scape, 1.85 mm; length of alitrunk (Comstock), 2.59 mm; cephalic index, 97. Resembling worker in shape of head and

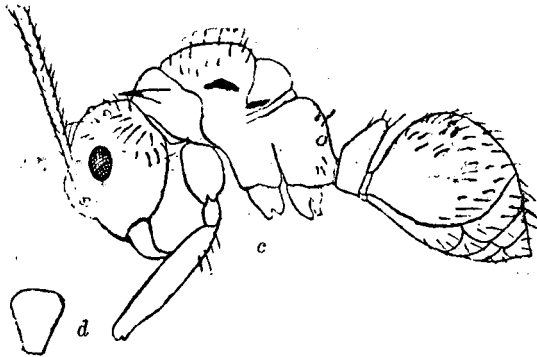


FIG. 7. *Polyrhachis (Anoplomyrma) parabiatica* sp. nov.: c, female; d, front view of petiole.

petiole. Ocelli small, pronotal spines short, propodium sloping and rounded at sides, unarmed. Petiole as broad as high, like that of worker but slightly stouter. Sculpture as in the worker, shining throughout. Pilosity and pubescence as in worker, the latter golden yellow.

Ecological notes: Workers and wingless females were taken from forays of *Myrmecaria* on the Cuernos de Negros at 1,500 to 4,000 feet altitude for many years. It was not until September 12, 1948, that I found a colony. It was in a dead frond of a tree fern. The fern trunk was partly surrounded by a mound nest of *Myrmecaria*. I took workers from the foray of this species began to look for the *Polyrhachis* nest again and found it in the fern frond. Both workers and females closely resemble *Myrmecaria* in color very closely. This is, the only nest I ever found.

**POLYRHACHIS (MYRMHOPLA) ETHELI** sp. nov.

Figs. 8a-b.

*Worker*.—Total length, 5.8 mm. Head length, 1.48 mm; head width, 1.29 mm; head depth, 1.11 mm; length of scape, 1.66 mm; length of alitrunk (Comstock), 2.03 mm; cephalic index, 87.

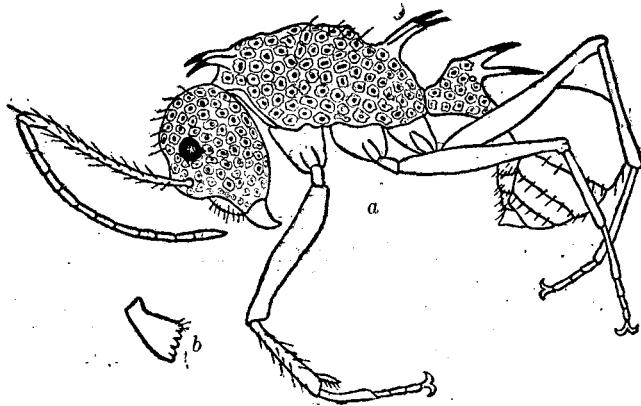


FIG. 8. *Polyrhachis (Myrmhopla) etheli* sp. nov.: a, worker; b, mandible of worker.

Head longer than broad, rounded behind eyes, cheeks evenly rounded, clypeus slightly carinate in middle, anterior border rounded, frontal area indistinctly defined. Instead of a frontal groove, a ridge extending backward between frontal carinæ to anterior angle of eyes. Antennæ long and slender, scape reaching about half its length beyond occipital border, funiculus longer than scape. Eyes small, strongly convex, situated at posterior third of head. Frontal carinæ approximate, a little further apart behind than in front, rather high in middle. Mandibles with five teeth each. Alitrunk subcylindrical, convex; pronotum narrower than head, with a pair of slender acute

spines directed outward, forward and downward at tips. Promesonotal suture barely showing on side, indistinct dorsally, base of propodium and declivity subequal, with slender acute spines, twice as long as pronotal spines, directed outward and backward. Declivity concave, terminating below in a marginate disk, that fitting into similar disk on front of petiolar node. Node above disk on petiole vertical, with superior surface flat, sides forming base of long diverging spines that curve around base of gaster, which is as broad as long and barely petiolate. Head, thorax, and nodes of petiole foveo-reticulate. Mandibles, scape, spaces between spines of propodium and node of petiole, gaster, and legs smooth and shining. Scattered erect-hairs on scape, mandibles, front and sides of head, thorax, posterior borders of tergites and sternites. Funiculus and last joints of tarsi pubescent. Mandibles, occipital region of the head, thorax and petiole dark red. Tips of spines and gaster black. Antennæ and legs yellowish red.

*Female*.—Total length, 7.39 mm. Head length, 1.66 mm; head width, 1.42 mm; head depth, 1 mm; length of scape, 1.85 mm; length of alitrunk (Comstock), 1.96 mm; cephalic index, 85.

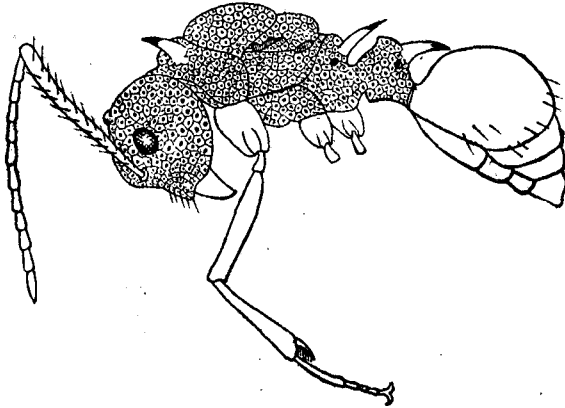


FIG. 8. *Polyrhacis* (*Myrmhopla*) *etheli* sp. nov.; female.

Head and petiole shaped like those of worker. Thorax robust, spines on pronotum and propodium shorter and stouter, not so black at tips. Gaster as broad as long, first tergite covering at least two-thirds of surface. Sculpture like that of worker, fovea somewhat shallower, disks on declivity and front of node much larger, node much stouter and rounded at



superior surface, mandibles, scape, and gaster smooth, entire surface shining. Erect hairs on cheeks, front, and clypeus; scarce on thorax, but more numerous on posterior border of tergite and tip of gaster. Funiculus, tarsi, and under surface of legs pubescent. Color the same as in the worker, occipital bright, and mesonotum somewhat darker.

This is the most striking species of *Polyrhachis*, both in color and sculpture, I have seen. Isolated specimens were first taken from some succulent plants in the deep ravines of the Cuernos de Negros in 1924, at 1,500 feet altitude. When disturbed they froze, so were easy to pick up. Wingless females and workers were taken and many years later I found a colony in the dead frond of a tree fern. When I struck the frond with my bolo, there rained down hundreds of workers, brood and sex forms. In 1958, Domingo Empeso found the second colony in the mountains back of Siaton, Oriental Negros. His specimens are considerably darker than the workers which I took earlier.

LIST OF PHILIPPINE SPECIES OF *ÆNICTUS* SHOWING THEIR DISTRIBUTION

1. *Ænictus* (*Ænictus*) *aratus* subsp. *nesiotus* Wheeler and Chapman.  
Type locality: Mt. Maquiling, Luzon. Cuernos de Negros Mts. Lake Balingsasayao, just north of the Cuernos; Siaton, south of the Cuernos; Zamboanga Peninsula, Mindanao.
2. *Ænictus* (*Ænictus*) *camposi* Wheeler and Chapman.  
Type locality: Cuernos de Negros, at 1,500 to 3,600 feet. Manapla Mountains, at 900 feet; and 3 specimens from Mt. Maquiling.
3. *Ænictus* (*Ænictus*) *papuanus* Donisthorpe.  
Type locality: New Guinea. Manapla Mountains, at 900 feet.
4. *Ænictus* (*Ænictus*) *philippinensis* sp. nov. *Fig. p. 249.*  
Type locality: Cuernos de Negros, at 1,500 and 3,600 feet.
5. *Ænictus* (*Ænictus*) *piercei* Wheeler and Chapman.  
Cadiz, Occidental Negros. Dumaguete City, and Gingoog Mountains, Oriental Misamis, Mindanao.
6. *Ænictus* (*Ænictus*) *powersi* Wheeler and Chapman.  
Type locality: Cuernos de Negros, at 1,800 feet.
7. *Ænictus* (*Ænictus*) *rabori* sp. nov. *Fig. p. 248.*  
Cuernos de Negros, at 3,600 feet.
8. *Ænictus* (*Ænictus*) *reyesi* sp. nov.  
Cuernos de Negros, at 1,500 feet.

9. *Ænictus* (*Ænictus*) sp.

Three colonies taken from the Cuernos de Negros Mountains at 1,500, 2,500, and 3,600 feet altitude. These are all related to the *turneri* Forel group in color, but differ in size and sculpture. I am unable to place them at this time.

10. *Ænictus* (*Typhlatta*) *alticola* Wheeler and Chapman.

Polis Pass, Benguet Province, at 6,000 feet.

11. *Ænictus* (*typhlatta*) *laeviceps* Fr. Smith.

Mt. Maquiling, Leyte, Cuernos de Negros, and several places on Negros Island, and on the island of Mindanao. In some colonies the workers seem to be more robust than in other colonies.

12. *Ænictus* (*typhlatta*) *luzoni* Wheeler and Chapman.

Bagia, Luzon, (Banks) 1913; Mt. Maquiling, Cuernos de Negros at 1,500 feet, and the Lake region north of the Cuernos at 2,700 feet.

13. *Ænictus* (*typhlatta*) *martini* Forel.

Mt. Maquiling: San Jose, Mindoro; Cuernos de Negros; throughout the island of Mindanao, (Gingoog, Davao, Lanao, Parker Lake on south Mindanao, and Zamboanga Peninsula). This species is more abundant than *laeviceps* Smith. The ratio in colonies on the Cuernos is 1 *laeviceps* to 4 *martini*.

*Martini* has small workers, which are abundant enough to attract attention to any one watching a foray. Measurements of the regular *martini* range from 3.4 to 3.55 mm. The range of ten small workers was 2.7 to 2.96 mm.

*Martini* Forel is the only species of *Ænictus* of which all three castes have been taken together.

LIST OF *ÆNICHTUS* MALES TAKEN AT LIGHTS

1. Banks, Philippines, 1913, 1 male, no locality given.
2. Cuernos de Negros, 1922, 1 male at 1,500 feet.
3. Cuernos de Negros at 1,500 feet, 3 males at 1,500 feet.
4. Cuernos de Negros, male in pitcher plant at 4,000 feet.
5. Cuernos de Negros, 1925, 1 male at 1,500 feet.
6. Cuernos de Negros, April, 1934, 1 male at 1,500 feet.
7. Dumaguete City, 1934, 1 male.
8. Dumaguete City, October 1947, 1 male.
9. Iloilo City, 2 males taken.
10. Los Baños, Williams, 2 males.
11. Mt. Maquiling, Baker, 1 male.
12. Mt. Apo, Mindanao, Clagg, 6,000 feet, 1 male.
13. Limay, Luzon, 1 male.
14. Samar, McGregor, 1 male.
15. San Jose, Mindoro, Ross, 1 male.
16. Iligan, Mindanao, Baker, 1 male, described by Memozzii, as *Ænictus bakeri* Menn. (1925).