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## ANTS OF THE GENERA MYOPIAS AND ACANTHOPONERA.<sup>1</sup>

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A recent study of the Australian ants collected some years ago by Mr. A. M. Lee and myself has led me to revise the Ponerine genera *Myopias* and *Acanthoponera*, two groups of more than usual interest on account of their singular geographical distribution. The former genus was established by Roger<sup>2</sup> more than 60 years ago for a Ceylonese ant, *M. amblyops*, which has not been taken since, although considerable thorough collecting has been done in India and Ceylon. A second species was brought to light in New Guinea by L. Biró and described in 1901 by Emery as *M. cribriceps*<sup>3</sup>. A third species has now been discovered by Mr. Lea in Tasmania and is described in the sequel. The highly vestigial eyes in the workers of these ants show that they are subterranean in habit, but they must be extremely rare, since a total of only eleven specimens has been seen. Their recorded distribution is so discontinuous that we may regard them as vanishing relicts of forms very close to the direct ancestors of *Trapeziopelta*, a genus represented by a number of species in the East Indies and New Guinea.

The distribution of *Acanthoponera* is even more interesting. It comprises two species in Australia, one in New Zealand and five in the Neotropical Region, from Chile, Argentina and Brazil to Central America and Mexico. All the American species occur in the southern portion of the range and the forms in Central America and Mexico are merely small varieties or subspecies which have strayed beyond the optimum environ-

<sup>1</sup>Contributions from the Entomological Laboratory of the Bussey Institution, Harvard University, No. 230.

<sup>2</sup>Berlin. Entom. Zeitschr. 5, 1861, p. 39.

<sup>3</sup>Termeszetr. Fuzet. 25, 1901, p. 156.

ment. The American forms, moreover, may be readily separated into two groups, one of which, including *A. mucronata* Roger, the type of the genus, and *goeldii* Forel, have tridentate claws and long epinotal spines, while the other, including the remaining species, *carinifrons* Mayr, *dentinodis* Mayr and *dolo* Roger, have, like the Australian forms, simple claws and a merely dentate epinotum. In my opinion, the latter group should be regarded as a distinct subgenus, for which I suggest the name **Anacanthoponera** subgen. nov., with *Ponera dolo* Roger as the type.

Few groups of ants resemble *Acanthoponera* in having an "antarctic" distribution. Perhaps the best example is the subgenus *Notomyrmex* of the genus *Monomorium*, which is represented by a number of species in Australia, New Caledonia, Lord Howe Island, Norfolk Island, New Zealand, a few in Patagonia and Chile and, according to Emery, also a few in Madagascar and East Africa. Mann's subgenus *Fulakora*, a group of species of the archaic genus *Stigmatomma*, with approximated frontal carinæ, may also be cited in this connection because it is represented in the East Indies, Solomon Islands, New Zealand, Argentina, Chile and Southern Brazil. The Chilean ants of the genus *Lasiophanes*; which are closely related to those of the genus *Prolasius* in New Zealand and of *Melophorus* in Australia afford another example. I might also cite the singular little hypogæic Ponerine ants of the genus *Discothyrea*, of which a few species occur in the East Indies, one in New Zealand, one of a closely allied genus, *Prodiscothyrea*, in Australia, a species recently discovered by Bruch in Argentina, one in Kamerun, one in Columbia and one which was described by Roger in 1863 from "North America", but which has never been taken since. Apart from its occurrence in Africa, the distribution of this genus is not unlike that of *Iridomyrmex*, though the latter is represented by many species in Australia and is absent from New Zealand, though occurring on Norfolk Island, in the Neotropical Region and as far north as our southern states. When we consult the fossil record, however, we find that the two genera last mentioned were represented by species of *Bradyponera* and *Iridomyrmex* respectively in the Baltic amber

and this suggests that they were cosmopolitan groups, possibly of northern origin, which now survive in the tropics and mainly in the southern hemisphere. I maintain, therefore, that the same explanation may account for the present peculiar and restricted distribution of *Acanthoponera*, *Notomyrmex* and *Fulakora*, since these, too, may have had a northern Eurasian origin during Cretaceous or early Tertiary times. Mann has recently discovered in Bolivia a species of the archaic Ponerine genus *Probolomyrmex* (*P. boliviensis*)<sup>1</sup>, previously known only from a species in South Africa (*P. filiformis* Mayr). These, too, in my opinion, may be isolated survivors of a group which had its origin in the northern hemisphere rather than on an antarctic land-mass or on a land-bridge between Africa and South America.

### Genus *Myopias* Roger

*Myopias tasmaniensis* sp. nov.

(Fig. 1.)

*Worker.* Length 3.8-4 mm.

Head subrectangular, as broad as long, slightly narrower behind than in front, with nearly straight sides and feebly, broadly concave posterior border. Eyes very small and flat,

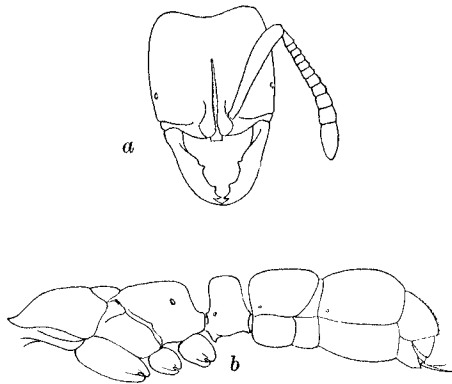


Fig. 1. *Myopias tasmaniensis* sp. nov. worker. *a*, head from above; *b*, thorax and abdomen in profile.

situated more than their own length from the posterior border of the clypeus, consisting of hardly more than 15 minute, crowded

<sup>1</sup>Psyche 30, 1923 p. 16, Fig. 2.

ommatidia. Mandibles long and narrow, convex and deflected, their external border straight in the middle, the apical border with four teeth (counting the terminal), the most basal small, acute and erect, near the middle of the border, the next somewhat larger and blunter and the preapical small and close to the terminal tooth. Clypeus very short, vertical, and transverse, above with a short, shelf-like, projecting, rectangular lobe immediately under the frontal carinæ. The latter with prominent, closely approximated lobes, their posterior continuations short and subparallel. Frontal groove deep and broad, extending back somewhat beyond the middle of the head. Antennal scapes reaching to within about twice the diameter of their tips from the posterior corners of the head; funiculi long, thickened distally, first joint about one and one-half times as long as broad, not as long as the three following joints together; these and the remaining joints, except the last, distinctly broader than long, the four terminal joints forming a distinct club. Thorax narrower than the head, with rather straight dorsal outline in profile, interrupted at the pronounced promesonotal and mesoëpinotal sutures; pronotum broader than long, somewhat rounded above and on the sides; mesonotum transversely elliptical, nearly twice as broad as long; epinotum subcuboidal, the base straight and distinctly longer than the abrupt declivity with which it forms a rounded rectangle, the declivity flat, not marginate on the sides or above. Petiole subcuboidal, higher and somewhat broader than long, rounded above; in dorsal view trapezoidal, narrower in front than behind, with straight sides and very feebly concave anterior and posterior borders, its ventral surface anteriorly with a small, blunt, lamellate tooth. Postpetiole broader than long, nearly half again as broad as the petiole, truncated in front and marked off by a strong constriction from the broader and more rounded first gastric segment, which is about one and one-third times as broad as long. Remaining segments very small. Sting well-developed. Legs long and rather stout; middle and hind tibiæ each with a well developed spur, the one on the hind tibiæ larger.

Very smooth and shining; mandibles with a few scattered punctures; clypeus transversely rugulose; cheeks finely punc-

tate; upper surface of head, thorax, petiole, postpetiole and first gastric segment rather coarsely punctate, the punctures being smallest and most numerous on the head, largest and least numerous on the thorax and node and intermediate in size and density on the postpetiole and gaster. Legs rather finely and indistinctly punctulate.

Hairs yellow, sparse, erect or suberect, longest on the gaster; short, abundant and subappressed on the appendages. Pubescence long, distinct only on the dorsal surface of the head.

Deep ferruginous brown; clypeus and borders of mandibles darker; legs paler, dull brownish yellow.

Described from two specimens taken by Mr. A. M. Lea at Hobart, Tasmania.

This species seems to be very close to the two other known species of the genus. It differs from *amblyops* in possessing an additional tooth on the mandibles, from *cribriceps* in having a shorter head and petiole and smaller eyes, and from both in having a small rectangular shelf-like lobe which projects from the upper part of the clypeus immediately under and between the lobes of the frontal carinæ. This last character is of peculiar significance since a similar though longer rectangular projection is one of the peculiarities of *Trapeziopelta* Mayr, a genus in other respects very closely related to *Myopias*, as Emery has remarked. One might, indeed, go so far as to regard *Trapeziopelta* as a subgenus of *Myopias*.

#### Genus *Acanthoponera* Mayr

##### *Acanthoponera* (*Anacanthoponera*) *imbellis* Emery

(Fig. 2.)

*Acanthoponera imbellis* Emery, Ann. Soc. Ent. Belg. 39, 1895, p. 346 ♀; Gen. Insect. Ponerinæ 1911, p. 36 ♀; Forel, Ark. Zool. 9, 1915, p. 10 ♀.

The typical form of this species was originally described from Kamerunga, Queensland, but seems to be widely distributed in Australia. Forel has recorded it from Adelaide, South Australia (E. Mjöberg), and I have seen specimens taken by Mr. A. M. Lea at Port Lincoln and Gawler in the same com-

monwealth. Emery gives the length of the type specimen as 2.75 mm. My specimens are somewhat larger (3.2 mm.) and Forel's measured 3-3.2 mm. The petiole when viewed from above is decidedly broader than long, the postpetiole and gaster are decidedly shining, the former densely punctate, with super-

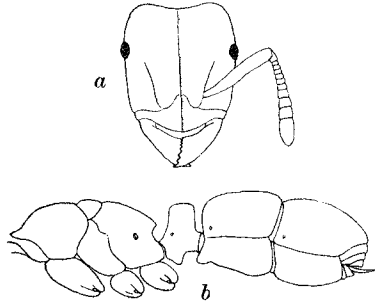


Fig. 2. *Acanthoponera* (*Anacanthoponera*) *imbellis* Emery, worker. *a*, head from above *b*, thorax and abdomen in profile.

imposed, scattered, larger punctures, or foveolæ, which have sharp anterior borders so that they are somewhat "eingestochen", to use a German expression. The color appears to be rather variable, the gaster being sometimes dark brown like the head or like both the head and thorax, sometimes paler brown with only the head dark.

#### Var. *hilaris* Forel.

*Ectatomma* (*Acanthoponera*) *imbellis* var. *hilare* Forel, Ann. Soc. Belg. 39, 1895, p. 421 ♀.

*Acanthoponera imbellis* var. *hilaris* Emery, Gen. Insect. Ponerinæ 1911, p. 10 ♀.

According to Forel, this variety, taken at Mackay, Queensland (Gilbert Turner), is larger than the type (3.6 mm.) and differs in sculpture as follows: "Abdomen densely punctate and subopaque. All the remainder densely and finely reticulate-punctate and opaque. Moreover, the front is coarsely longitudinally rugose, while the other portions of the head, the thorax

and petiole are covered with dense, superimposed foveolæ, in part reticulate or transformed into rugæ."

A single specimen taken at Sydney, New South Wales (A. M. Lea) agrees with this description.

Var. *scabra* var. nov.

*Worker.* Length 2.5-3 mm.

Differing from the typical *imbellis* and the preceding variety in having the petiolar node distinctly longer in proportion to its width. The sculpture of the head, thorax and petiole is coarser and the postpetiole and base of the first gastric segment, though feebly shining, are longitudinally reticulate-rugulose. The color is dark brown, with the mandibles, antennæ and legs brownish or reddish yellow. One specimen has the postpetiole and gaster paler and more reddish than the head and thorax.

Described from three workers taken by Mr. A. M. Lea at Sydney, New South Wales.

*Acanthoponera* (*Anacanthoponera*) *leæ* sp. nov.

(Fig. 3.)

*Worker.* Length 4 mm.

Head subrectangular, a little longer than broad and very slightly narrower in front than behind, the posterior border

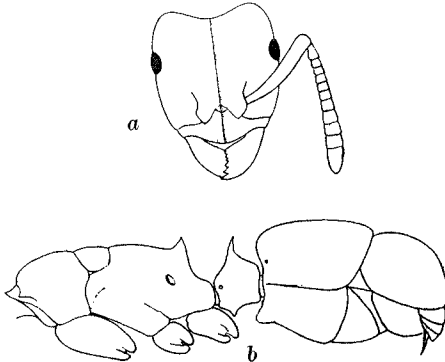


Fig. 3. *Acanthoponera* (*Anacanthoponera*) *leæ* sp. nov. worker. *a*, head, from above; *b*, thorax and abdomen in profile.

rather deeply and broadly concave, the sides feebly and evenly convex, the median longitudinal costa, or carina, extending back over the front and vertex, very pronounced. Eyes rather small, moderately convex, their anterior orbits just behind the median transverse diameter of the head. Mandibles large and broad, their external border rather straight in the middle, the terminal border with only three distinct large apical teeth, the more basal denticles appearing as mere undulations. Clypeus sharply carinate, its anterior border entire, broadly rounded and depressed; frontal area short and indistinct, with a median carina continuous with those of the clypeus and dorsal surface of the head; frontal carinæ separated as in *imbellis* subparallel, scarcely reaching to the level of the anterior orbits, bordering a depressed area on each side for the accommodation of the antennæ. Scapes of the latter reaching somewhat beyond the eyes; funicular joints 2-7 subequal, transverse but less so than in *imbellis*, the three terminal joints forming an indistinct club, the last joint somewhat longer than the two preceding subequal joints together. Thorax in profile feebly rounded above, slightly more convex and broadest in the region of the pronotum, which is transversely subrectangular, with distinctly dentate anterior corners, the teeth being nearly as long as the width of their bases. Promesonotal suture subangular, distinct but not strongly impressed; mesoëpinotal suture obsolete. Mesonotum short, broader than long, somewhat semicircular. Epinotum with nearly straight base which is distinctly longer than the abrupt, slightly concave declivity, the lateral angles between the two surfaces forming stout, broad, rather acute and erect teeth. The declivity is longitudinally grooved in the middle but not marginate on the sides below. Petiolar node cuneate in profile, about one and one-half times as high as long, narrowed above, its summit produced in the middle as a short, stout, erect spine; seen from above the node is somewhat hexagonal, broader than long, the median transverse diameter corresponding with the narrowed, transverse summit. At the anteroventral end of the petiole there is an acute, backwardly directed tooth. Postpetiole very large, longer than broad, narrowed in front, where its anterior surface is abruptly truncated and concave, its



sides convex, its anteroventral edge with a transverse tubercle. Gaster small and short, much smaller than the postpetiole, the first segment convex above, semicircular, scarcely longer than broad, enveloping the remaining segments which are very small and together form a downwardly directed cone. Sting small. Legs rather long and stout; tarsal claws simple.

Opaque; mandibles somewhat shining, finely striate and coarsely punctate, the striae and punctures more numerous near the apical border. Clypeus finely and indistinctly punctate-rugulose. Head between and behind the frontal carinae coarsely and divergently longitudinally rugose, with coarse punctures, or foveolae in the interrugal spaces; sides of head with the rows of foveolae more distinct. Thorax, petiole, postpetiole and first gastric segment coarsely rugose and foveolate, the rugae vermiculate and reticulate on the pronotum and petiole, longitudinal on the mesoepinotum, including the epinotal declivity, mesopleurae, postpetiole and first gastric segment, most sharply on the two latter regions. Terminal gastric segments smoother and somewhat shining; scapes and legs subopaque, densely punctate.

Hairs yellow, fine, uneven, rather abundant and rather short, erect or suberect on the body; the appendages covered with abundant, fine, rather appressed hairs with fewer, interspersed, long, erect hairs.

Deep castaneous brown; mandibles, scapes, tip of gaster and legs, excluding the coxae, yellowish brown; apical borders of mandibles and median carina of head black.

Described from two specimens taken by Mr. A. M. Lea in the National Park, near Sydney, New South Wales.

This very distinct species is interesting because, unlike the other known Australasian species of the genus, it approaches the Neotropical *mucronata* in the armature of the petiole.

*Acanthoponera (Anacanthoponera) browni* Forel

*Acanthoponera brownii* Forel, Mitteil. Schweiz. Ent. Zeitschr. 8, 1892, p. 330 ♀; Emery, Gen. Insect. Ponerinae 1911, p. 36 ♀.  
*Acanthoponera brownii* Forel, Trans. New Zealand Inst. 37, 1904, p. 353 ♀.

This species was described from specimens taken by Major Thos. Broun at Drury, near Auckland, New Zealand. Forel originally spelled the gentleman's name "Brown" and named the species "brownii" but corrected the error in 1904. Emery in the "Genera Insectorum" questions the advisability of this procedure. I can only record my conviction that such obvious taxonomic blunders should be corrected and not propagated indefinitely in the literature in a spirit of silly pedantry.

**Subsp. *kirki* subsp. nov.**

(Fig. 4.)

*Worker.* Length 2.3-3 mm.

Smaller than the typical form of the species, which measures 3.2-3.5 mm. The head is not coarsely but very finely and indistinctly rugulose. The declivity of the epinotum is strongly concave, its lateral marginations enlarged above to form blunt but distinct teeth. The color differs from that of the type as

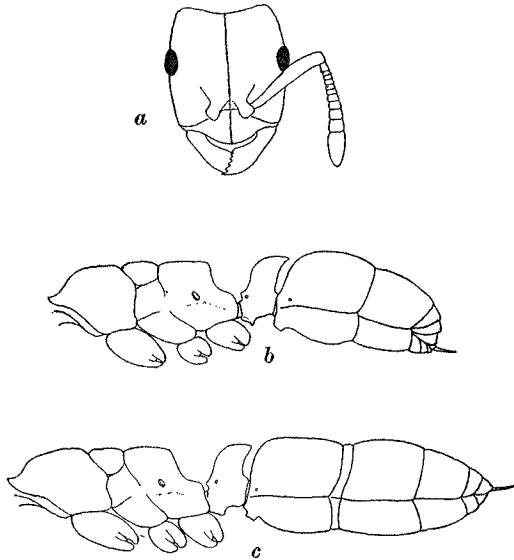


Fig. 4. *Acanthoponera* (*Anacanthoponera*) *brouni* Forel subsp. *kirki* subsp. nov. a, head of worker from above; b, thorax and abdomen of same in profile; c, thorax and abdomen of ergatomorphic female in profile.

follows; Body ferruginous red; mandibles, clypeus, mesonotum and gaster brownish yellow; dorsal surface of epinotum, the petiole and posterior borders of postpetiole and gastric segments dark brown; coxæ and legs pale yellow, knees and tarsi reddish.

*Female.* Length 3.2 mm.

Wingless and ergatomorphic, differing from the worker only in its slightly larger size, in possessing small ocelli, in having the marginations of the epinotal declivity more rounded and less dentate above and in the larger abdomen, the postpetiole and first gastric segment especially being more voluminous. The color of the body is also different, the pronotum being darker than the meso- and epinotum, the petiole, postpetiole and gaster reddish brown like the pronotum, with the posterior borders of the segments brownish yellow. The anterior is somewhat paler than the posterior half of the head.

Described from numerous workers and a single female which I took Sept. 5, 1914 from a single colony, comprising about 100 individuals in the Waitakari Forest, near Auckland, New Zealand. The ants were nesting under a dead branch of one of the huge kaori trees (*Agathis australis*), which was lying on an exposed root of the tree from which it had fallen. When first disturbed the workers were quite active but on being touched curled up and "feigned death". Similar behavior was observed by Hetschko in the Brazilian *A. dentinodis*, according to Mayr. The single female, described above, was evidently the mother queen of the colony, which had a number of small larvæ. These resembled the larvæ of *Ectatomma* in being smooth, that is nontuberculate, and in being covered with dense, soft hairs. The subspecies is dedicated to Prof. H. B. Kirk of Victoria University, Wellington, the memory of whose kindness during my sojourn in New Zealand I shall always cherish.

The occurrence of a single ergatomorphic female as the mother queen of *kirki* is of interest, because so few females of *Acanthoponera* have been taken, and because in the Neotropical *dentinodis*, *dolo* and *mucronata* all the recorded individuals were of the typical winged type. But Emery in 1906 found two individuals like the workers but with more voluminous abdomens among specimens of the Chilean *carinifrons*. One of these,

with the larger abdomen, was paler in color than the workers, with higher petiole and more pubescent legs and gaster. He regarded this individual as an ergatoid female and the other as a form transitional to the normal worker. That he was correct in his assumption is shown by the foregoing observations on *kirki*. Whether such ergatomorphic females ever co-exist with winged forms in the same species or colony will have to be determined by future observations.

I insert here a list of the American species and varieties of *Acanthoponera* with their synonymy and known distribution:

*Acanthoponera (Anacanthoponera) carinifrons* (Mayr)

*Heteroponera carinifrons* Mayr, Verh. zool. bot. Ges. Wien 37, 1887, p. 533 ♀; Dalla Torre, Cat. Hymen. 7, 1893, p. 43 ♀.

*Acanthoponera carinifrons* Emery, Ann. Soc. Ent. Belg. 39, 1895, p. 347 ♀; Bull. Soc. Ent. Ital. 37, 1906, p. 112 ♀ ♀; Gen. Insect. Ponerinæ 1911, p. 36 ♀ ♀.

Type locality: Valdivia, Chile.

Chile: Coipué, San Vicente (F. Silvestri); Corral (R. Thaxter, my collection).

*Acanthoponera (Anacanthoponera) dentinodis* Mayr.

*Ectatomma (Acanthoponera) dentinode* Mayr, Verh. zool. bot. Ges. Wien 37, 1887, p. 541 ♀ ♀ ♂; Emery, Bull. Soc. Ent. Ital. 26, 1894, p. 143, 144 ♀.

*Ectatomma dentinode* Dalla Torre, Cat. Hymen. 7, 1893, p. 24 ♀ ♀ ♂.

*Acanthoponera dentinodis* Emery, Gen. Insect. Ponerinæ 1911, Op. 36, ♀ ♀ ♂.

Type locality: Santa Catharina, Brazil (Hetschko).

Bolivia (L. Balzan); Brazil: Novo Friburgo.

Var. *inermis* Emery.

*Ectatomma (Acanthoponera) dentinode* var. *inermis* Emery, Bull. Soc. Ent. Ital. 26, 1894, p. 143 ♀.

*Acanthoponera dentinodis* var. *inermis* Emery, Gen. Insect. Ponerinæ 1911, p. 36 ♀.

Type locality: Rio de Janeiro, Brazil.

Var. *panamensis* Forel.

*Ectatomma (Acanthoponera) dentinode* Forel var. *panamense* Forel, Biol. Centr. Amer. Hymen. 3, 1899-1900, p. 9 ♀.

*Acanthoponera dentinodis* var. *panamensis* Emery, Gen. Insect. Ponerinæ 1911, p. 36 ♀.

Type locality: Volcan de Chiriqui, 3000 ft., Panama (Champion).

*Acanthoponera (Anacanthoponera) dolo* (Roger).

*Ponera dolo* Roger, Berlin. Ent. Zeitschr. 4, 1860, p. 293 ♀ ♀.

*Ectatomma (Acanthoponera) dolo* Mayr, Verh. zool. bot. Ges. Wien 12, 1862, p. 733; *ibid.* 37, 1887, p. 540.

*Ectatomma dolo* Dalla Torre, Cat. Hymen. 7, 1893, p. 24 ♀.

*Acanthoponera dolo* Emery, Bull. Soc. Ent. Ital. 37, 1906, p. 112 ♀; Forel Verh. zool. bot. Ges. Wien 1908, p. 342 ♀; Emery, Gen. Insect. Ponerinæ 1911, p. 36 ♀ ♀; Forel, Ann. Soc. Ent. Belg. 56, 1912, p. 34 ♀; Bruch, Revist. Mus. La Plata 19, 1914, p. 214 ♀ ♀; Gallardo, An. Mus. Nac. Hist. Nat. Buenos Aires 30, 1918, p. 18 ♀ ♀; Luederwaldt, Notas Myrmecologicas, São Paulo, 1918, p. 6.

Type locality: Brazil (Schaum and von Olfers).

Brazil: Bella Vista, Paraná (F. Silvestri); São Paulo (von Ihering); Prov. Rio Janeiro (Goeldi); Ilha de S. Sebastião, Alto da Serra, Salto Grande, Ituverava, São Paulo (H. Luederwaldt).

Argentina: Puerto Piray, Misiones (F. Silvestri).

Var. *aurea* Forel.

*Acanthoponera dolo* var. *aurea* Forel, Bull. Soc. Vaud. Sc. Nat. 49, 1913, p. 203 ♀ ♂; Bruch, Revist. Mus. La Plata 19, 1914, p. 214 ♀; Gallardo, An. Mus. Nac. Hist. Nat. Buenos Aires 30, 1918, p. 20 ♀ ♂. Fig. 1.

Type locality: Misiones, Argentina (C. Bruch).

Var. *schwebeli* Luederwaldt.

*Acanthoponera dolo* var. *schwebeli* Luederwaldt Revist. Mus. Paul. 1918, p. 54 ♀; German transl. São Paulo 1920, p. 3 ♀; Notas Myrmecologicas, São Paulo. 1918, p. 6.

Type locality: Alto da Serra, São Paulo, Brazil (E. Schwebel)

*Acanthoponera goeldii* Forel.

*Acanthoponera goeldii* Forel, Ann. Soc. Ent. Belg. 56, 1912, p. 34 ♀.

Type locality: Prov. Espiritu Santo, Brazil (Goeldi).

Subsp. *schwarzi* subsp. nov.

(Fig. 5.)

*Worker.* Length 4.5 mm.

Agreeing well with Forel's description of the type but smaller, with the petiolar spine as long as the epinotal spines and apparently directed somewhat more upward. The epinotal spines diverge and their downward deflection is feeble. There is no constriction between the postpetiole and gaster. The color seems to be paler, being brownish yellow, the postpetiole and

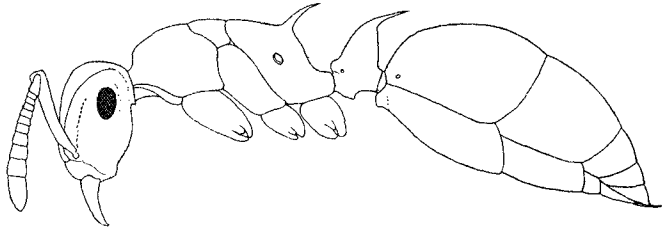


Fig. 5. *Acanthoponera goeldii* subsp. *schwarzi* subsp. nov. Worker, lateral aspect.

gaster lighter than the head and thorax (darker in the typical *goeldii*), as pale as the legs. Only the overlapping posterior borders of the segments brown. Judging from the description of *goeldii*, the sculpture of the head, thorax and petiole is finer and more indistinct and the postpetiole and gaster are not aciculate, but very finely and superficially punctulate. Pubescence on these

latter regions conspicuously long. The frontal carinae with their accompanying scrobes extend to the posterior corners of the head and there curve downward and forward to terminate under the eyes, as in the typical *goeldii*.

Described from a single specimen found running on a cacao tree at Trece Aguas, Alta Vera Paz, Guatemala by Messrs. E. A. Schwarz and H. S. Barber.

This may be a distinct species, but as I have seen no specimens of the typical *goeldii*, with the description of which it agrees in quite a number of characters, it may stand provisionally as a subspecies.

*Acanthoponera mucronata* (Roger).

*Ponera mucronata* Roger, Berlin. Ent. Zeitschr. 4, 1860, p. 299  
♂ ♀.

*Ectatomma (Acanthoponera) mucronatum* Mayr. Verh. zool. bot. Ges. Wien 12, 1862, p. 962; *ibid.* 37, 1887, p. 540; Emery, Bull. Soc. Ent. Ital. 26, 1894, p. 143 ♀; Forel, Biol. Centr. Amer. Hymen. 3, 1899-1900, p. 9 ♂ ♀.

*Ectatomma mucronatum* Dalla Torre, Cat. Hymen. 7, 1893, p. 25 ♂ ♀.

*Acanthoponera mucronata* Emery, Gen. Insect. Ponerinae 1911, p. 36 ♂ ♀. Pl. 2, Fig. 2; Forel, Ann. Soc. Ent. Belg. 56, 1912, p. 34 ♂; Luederwaldt, Notas Myrmecologicas, São Paulo 1918, p. 6. Type locality: Brazil (von Olfers).

Brazil: Matto do Governo, São Paulo (H. Luederwaldt); Corcovado, near Rio de Janeiro (A. Müller); Matto Grosso.

Var. *minor* Forel.

*Ectatomma (Acanthoponera) mucronatum* var. *minor* Forel, Biol. Centr. Amer. Hymen. 3, 1899-1900, p. 9 ♂.

*Acanthoponera mucronata* var. *minor* Emery, Bull. Soc. Ent. Ital. 28, 1896, p. 33 ♂; Gen. Insect. Ponerinae 1911, p. 36 ♂. Type locality: Teapa en Tabasco, Mexico (H. H. Smith). Costa Rica: Suerre (A. Alfaro).

Var. *wagneri* Santschi.

*Acanthoponera mucronata* var. *wagneri* Santschi, Bull. Soc. Vaud Sc. Nat. 54, 1921, p. 84 ♀.

Type locality: Banderas, 55 km. north of Icaño, Chaco de Santiago del Estero, Argentina (E. R. Wagner).

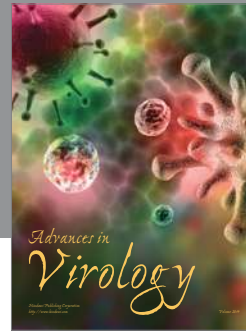
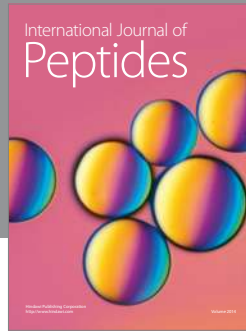
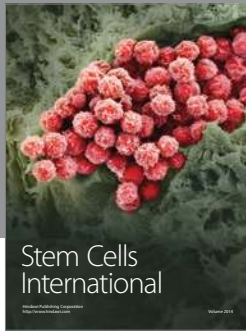
The following key may serve for the identification of the workers of the various forms of *Acanthoponera* mentioned in this paper:

1. Claws tridentate; epinotum armed with spines; petiole terminating above and behind in a spine; constriction between postpetiole and gaster feeble or absent (subgen. *Acanthoponera* sens. str.).....2
- Claws simple: epinotum at most dentate or subdentate; petiole (except in *A. leæ*) unarmed or merely with a median tooth or projection behind; constriction between postpetiole and gaster well-developed. (subgen. *Anacanthoponera* subgen. nov.).....6.
2. Frontal carinæ and adjacent scrobes extending around the posterior corners of the head and terminating under the eyes; funicular joints 2-5 at least twice as broad as long; epinotal spines curved downward.....3.
- Frontal carinæ and scrobes terminating at posterior corners of head; scapes more slender, funicular joints 2-5 somewhat broader than long.....4.
3. Petiolar spine shorter than the epinotal spines; constriction between postpetiole and first gastric segment distinct; these segments aciculate, subopaque. Length 4.9-5 mm. (Brazil)..... *goeldii* Forel.
- Petiolar spine as long as the epinotal spines; constriction between postpetiole and first gastric segment absent; these segments shining, finely punctate. Length 4.5 mm. (Guatemala).....subsp. *schwarzi* subsp. nov.
4. Epinotal spines curved inwards. Length 8 mm.; female 10 mm. Postpetiole and first gastric segment punctate-rugulose, subopaque. (Brazil).....*mucronata* (Roger.)
- Length 6 mm. or less.....5.



5. Anterior corners of pronotum angular; epinotal spines straight and divergent; postpetiole and gaster shining and sparsely punctate. Length 6 mm. (Argentina).  
var. *wagneri* Santschi.  
Anterior corners of pronotum more rounded; petiolar spine somewhat more erect. Length 5.3mm. (Mexico).  
var. *minor* Forel.
6. Australasian species; dark brown.....7.  
Neotropical species; black, brownish yellow, or brownish red.....12.
7. Petiole armed with an erect spine above; anterior corners of pronotum dentate. Length 4 mm. (New South Wales).  
*lea* sp. nov.  
Petiole unarmed, anterior corners of pronotum rounded. Length less than 4 mm.....8.
8. Petiolar node concave behind, the posterior border of its summit distinctly produced backwards.....9.  
Petiolar node truncated behind, its posterior border not produced.....10.
9. Larger (3.2-3.5 mm.); head coarsely rugose; epinotum scarcely dentate (New Zealand).....*browni* Forel.  
Smaller (2.3-3 mm.); head finely and distinctly rugose; epinotum more distinctly dentate; legs paler. (New Zealand).....subsp. *kirki* subsp. nov.
10. Front of head rather finely rugose; postpetiole and gaster shining, punctate and sparsely foveolate. Length 2.75-3.2 mm. (Queensland; South Australia).*imbellis* Emery.  
Front of head more coarsely rugose; postpetiole and gaster subopaque.....11.
11. Postpetiole and gaster densely punctate. Length 3.6 mm. (Queensland; South Australia)...var. *hilaris* Forel.  
Postpetiole and first gastric segment longitudinally reticulate-rugose. Stature smaller (2.5-3mm.). (New South Wales).....var. *scabra* var. nov.
12. Black; petiole without a distinct tooth on its posterior border. Length 3.3-3.7 mm. (Chile)...*carinifrons* Mayr.  
Brownish yellow or brownish red; petiole usually armed with a distinct tooth or projection.....13.

13. Frontal carinæ as long as the antennal scapes. . . . . 14.  
 Frontal carinæ much shorter, reaching only to the level of  
 of the eyes. . . . . 16.
14. Sculpture coarse. Length 3-4.2 mm. (Brazil, Bolivia),  
 . . . . . *dentinodis* Mayr.  
 Sculpture finer. . . . . 15.
15. Petiolar tooth reduced to a mere convexity (Brazil).  
 var. *inermis* Emery.  
 Petiolar tooth distinct; pubescence more abundant; color  
 deeper. (Panama) . . . . . var. *panamensis* Forel.
16. Teeth of epinotum and petiole distinct. . . . . 17.  
 Teeth of epinotum and petiole absent. (Brazil) . . . . .  
*dolo* var. *schwebeli* Luederwaldt.
17. Larger (5-5.5 mm.); anterior surface of petiolar node more  
 rounded; legs with numerous suberect hairs (Brazil,  
 Argentina) . . . . . *dolo* Roger.  
 Smaller (4.5 mm.); anterior surface of petiolar node more  
 angular in profile above; thorax less convex; legs only  
 with appressed or subappressed hairs; pubescence more  
 brilliant and golden (Argentina) . . . . . var. *aurea* Forel.



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