

WILLIAM MORTON WHEELER

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Ants Collected by Prof. F. Silvestri  
in MEXICO

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The following series of ants, taken by Professor Filippo Silvestri during the course of a very hasty visit to tropical Mexico and while engaged in making extensive collections of other Arthropods, comprises an unusual number of interesting forms. Among these there is a new and aberrant species of *Megalomyrmex* (*M. silvestrii*) and two other species, *Cremastogaster formosa* and *Ectatomma interruptum*, which seem not to have been taken since they were first described many years ago by Mayr.

**Family Formicidae.**

**Subfamily Ponerinae.**

1. — *Pachycondyla harpax* Fabr. subsp. *montezumia* F. Smith.

A single immature worker from Córdoba in Vera Cruz.

2. — *Ectatomma* (*Holcoponera*) *strigatum* Norton.

Eight workers from Jalapa in Vera Cruz.

3. — *Ectatomma* (*Gnamptogenys*) *interruptum* Mayr.

Seven workers and four immature females from San Francisco in Vera Cruz.

The workers agree very closely with Mayr's description and the females are much like the workers in size and sculpture. The

promesonotal constriction is very pronounced in the latter sex and the wings must be fuliginous or blackish in mature specimens.

Mayr described the species from a single specimen of an unknown provenience. He supposed that it must have come from South America. It has not since been recognized, so far as I am able to ascertain, and is not mentioned in Forel's account of the Formicidae in the "Biologia Centrali-Americana. „

4. — *Leptogenys (Lobopelta) consanguinea* sp. nov.

*Worker.* Length 5-5.3 mm.

Head fully a third again as long as broad, broader in front than behind, with parallel cheeks, straight but converging post-ocular borders and slightly excised posterior border. Eyes rather small, flattened, in front of the middle of the head. Mandibles somewhat more than half as long as the head, slender, edentate, their blades with apical and basal borders forming with each other a very large and indistinct obtuse angle. Clypeus strongly carinate, pointed, projecting forward and filling the space between the closed mandibles, its median portion forming a lobe separated on each side by a notch from the remainder of the clypeus. Antennae long and robust; scapes projecting somewhat less than  $\frac{1}{3}$  their length beyond the posterior corners of the head; all the funicular joints decidedly longer than broad, second joint but little longer than the third. Thorax long and slender, narrower than the head; pronotum and base of epinotum flattened above, horizontal; mesoepinotal depression distinct but shallow. Base of epinotum about six times as long as the declivity, the latter concave and bounded below by a transverse ridge which terminates on each side in a small tooth or tubercle. Petiole from above fully  $1\frac{1}{2}$  times as long as broad, laterally compressed, not as high as the first gastric segment; in profile with short, abrupt anterior surface passing into a dorsal surface which is evenly rounded and slopes upward. This at its posterior end suddenly passes through a distinct but rounded angle into the posterior surface which is very abrupt and slightly concave. Gaster and legs of the usual shape. Claws simple, straight and very slender.

Body very smooth and shining. Mandibles very sparsely and rather indistinctly punctate. Clypeus feebly longitudinally rugulose. Head, thorax, petiole and gaster very finely and indistinctly punctate. Meso- and metapleuræ slightly rugulose below.

Hairs yellow, short, suberect and moderately abundant both on the body and appendages, conspicuously longer on the clypeus and tip of the gaster.

Piceous black; mandibles, clypeus, antennae and legs reddish brown; antennal scapes and femora somewhat darker; sting, terminal gastric segments and border of basal segments, yellow.

*Male.* Length. 4.2 mm.

Head, including the eyes, longer than broad. Eyes much smaller and flatter than in the male of *L. elongata* Buckley; ocelli very small, not projecting. Mandibles minute, far from meeting. Clypeus not projecting in the middle, but with broadly rounded anterior border. Antennæ long and slender; scapes as long as the second and third funicular joints together; first funicular joint not swollen, about twice as long as broad. Thorax slender; mesonotum flattened; epinotum rounded and sloping, without distinct base and declivity. Petiole more rounded above than in the worker and with less abrupt and concave posterior surface. Genitalia smaller and much less extruded than in *L. elongata*.

Shining; obscurely and sparsely punctate; head apparently somewhat opaque.

Pilosity similar to that of the worker, longest and most abundant on the gastric segments

Yellow; with brownish sutures and articulations and a blackish spot covering the ocellar triangle. Wings infuscated, with brown veins.

Three workers and one male from Córdoba.

This species appears to be closely allied to *L. pubiceps* of La Guaira and *L. punctaticeps* of Costa Rica. Emery, who described both of these species, refers them to *Leptogenys* s. str. *L. pubiceps* has the second flagellar joint in the worker as long as the third and fourth together, and the sides of the thorax and petiole and the epinotal declivity are more heavily sculptured than in *L. consanguinea*, and the petiole is as broad as long. *L. punctaticeps* seems to be even more closely related to the new species but, judging from Emery's description, the sides of the

thorax and petiole are more coarsely sculptured, the head is more distinctly punctate and the joints of the apical half of the funiculus are broader than long.

5. — *Odontomachus hamatodes* L.

Two workers from Jalapa.

Subfamily Dorylinae.

6. — *Cheliomyrmex nortoni* Mayr.

Numerous workers, in part very immature, from Orizaba.

7. — *Eciton burchelli* Westwood, var. *infumatum* var. nov.

*Worker*. Differing from the typical *burchelli* in color. The body is black, with the articulations of the legs, the tarsi, tips of the antennal scapes, inner borders of mandibles, the clypeus and posterior border of the gastric segments deep red.

*Soldier*. Head brownish yellow, excepting the clypeus, cheeks and mandibles, which are blackish. Thin anterior border of clypeus yellowish. Anterior portion of thorax black, more or less of posterior portion brown. Legs, petiole, postpetiole and gaster chocolate brown, antennæ darker. In some specimens the two ridges on the epinotum do not meet behind to form a transverse ridge, but merely converge and then run down onto the declivity.

Numerous workers and one soldier from Córdoba; also a series of workers and four soldiers from Manatee and Belize, British Honduras (J. D. Johnson).

8. — *Eciton (Acamatus) commutatum* Emery.

A single worker from Jalapa seems to belong to this species.

**Subfamily Myrmicinae**

9. — *Pseudomyrma gracilis* Fabr. var. *bicolor* Guérin.

A single worker from Cuernavaca in Morelos.

10 — *Pseudomyrma gracilis* var. *mexicana* Emery.

A single small worker from Orizaba.

11. — *Pseudomyrma flavidula* F. Smith.

One worker from Jalapa. It lacks the usual black spots on the base of the gaster.

12. — *Solenopsis geminata* Fabr.

A few workers from Jalapa belong to the typical dark form of this species.

13. — *Solenopsis geminata* var. *diabola* Wheeler.

Many workers and winged females from San Francisco in Vera Cruz, and Jalapa.

14. — *Pheidole vasliti* Pergande var. *hirtula* Forel.

Soldiers, intermediates, workers and winged females from the state of Mexico. The females measure about 8 mm. and are black, with reddish-brown mandibles, antennæ and legs; scapes and middle portions of femora darker. Wings longs (10 mm), yellowish, with pale brown veins and stigma. The long hairs on the body are much sparser than in the soldier. Head subopaque, longitudinally reticulate rugose; thorax and gaster shining, the pleurae of the former subopaque and longitudinally rugose, the latter finely and sparsely punctate, Petiole and postpetiole opaque, the former and the epinotum longitudinally rugose. Epinotal spines stout and blunt.

15. — *Pheidole confœdusta* sp. nov.

*Soldier*. Length 4-4.5 mm.

Head rather small, convex, as broad as long, with subparallel sides, rounded posterior corners and rather shallow occipital groove. Eyes moderate, convex, circular, distinctly in front of the middle of the head. Mandibles with two large apical and several small basal teeth. Clypeus short, flattened, not carinate, with a rather deep notch in the middle of the anterior border. Frontal area impressed, triangular, decidedly broader than long, rounded behind. Frontal carinae very short. Antennal scapes almost or quite reaching the posterior corners of the head, curved and distinctly dilated and flattened at their bases; funiculi slender; joints 2-8 subequal, nearly twice as long as broad; club distinctly shorter than the remainder of the funiculus. Thorax rather slender, in front about half as broad as the head; humeri rounded, not prominent; mesonotum with a feeble transverse depression in the middle. Mesoëpinotal constriction deep and broad; epinotum with subequal base and declivity, the former feebly convex, the latter concave and sloping up without an angle into the base between the spines. Spines acute, shorter than their distance apart, longer than broad at their bases, directed upward and slightly backward and outward. Petiole twice as long as it is broad through its node, its peduncle with parallel sides; node rather strongly compressed antero-posteriorly, with transverse upper border, sinuately notched in the middle. Postpetiole a third broader than the petiole, distinctly broader behind than in front, with a very small and sometimes indistinct tubercle or projection on each side near the middle. Gaster broadly elliptical, smaller than the head. Legs long and slender.

Mandibles shining, coarsely and sparsely punctate, striate at their bases. Clypeus and frontal area shining, the former longitudinally rugose on the sides, more feebly and irregularly rugose in the middle. Head nearly opaque, rather densely and finely reticulate-rugose and punctate throughout. Antennal foveae laterally with concentric, region between frontal carinae with longitudinal rugae; floor of occipital groove crossed by numerous delicate transverse ridges. Thorax, petiole and postpetiole nearly opa-

que, finely and rather irregularly punctate rugose; declivity of epinotum smoother and more shining; postpetiole with a few indistinct longitudinal furrows. Gaster and legs shining, the former very finely shagreened and with small, scattered, piligerous punctures. Antennal scapes opaque, punctate and rugulose.

Hairs yellowish, very long, suberect, uniformly abundant on the body, legs and scapes.

Reddish-brown; mandibles and legs yellowish, the inner borders of the latter and anterior border of clypeus, black; gaster dark brown or blackish, the posterior margins of its segments yellowish.

Described from ten specimens taken at Jalapa.

This species is rather closely related to *Ph. hyatti* Emery, *titanis* Wheeler, *cockerelli* Wh. and *texana* Wh., but differs from all of these in the greater length of its antennal scapes and petiolar peduncle and in the longer, coarser hair covering the body and appendages. From *hyatti* and *titanis*, *confedusta* also differs in the denser, more opaque sculpture of the head, from the latter in its much smaller size, from *cockerelli* and *texana* in the proportionally smaller size of the head, more slender thorax and more rounded humeri.

16 — *Cremastogaster formosa* Mayr. var. *aterrima* var. nov.

*Worker*. Length 3.5-4 mm.

Agreeing very closely with Mayr's description of *formosa* except in color, Whole body deep black, except the terminal tarsal joints, which are brownish. Frontal groove prolonged behind to the occiput as a faint impression. Mesonotum convex and rounded; epinotal spines long and divergent, but shorter than the distance between their bases, rather suddenly tapering, pointed and slightly curved upward. Posterior angles of petiole small and acute. Groove in postpetiole very feeble. Hairs and pubescence whitish, very sparse.

*Male*. Length 3 mm.

Mandibles tridentate. Antennae short. Head, including the eyes, broader than long; cheeks extremely short. Thorax large, with very convex pronotum; epinotum small, unarmed, rounded, with

a median longitudinal groove. Petiole and postpetiole similar to those of the worker, but the former segment without posterior teeth. Genitalia extruded. Legs slender.

Head opaque and finely punctate. Remainder of body shining; pronotum sparsely punctate.

Hairs reclinate, longer and much more abundant than in the worker.

Piceous black, legs brown: antennae and genitalia whitish, valves of the latter tipped with brown or black. Wings grayish hyaline, with pale veins and stigma.

Numerous specimens from Jalapa.

Except in color this species agrees so closely with Mayr's description of *C. formosa* that I have decided not to describe it as a distinct species, although I am unable to find anything like it among the various tropical New World species, many of which are represented in my collection. Mayr's *formosa* seems not to have been recognized by subsequent observers, although it was taken in Mexico.

— 17 — *Megalomyrmex silvestrii* sp. nov.

*Worker.* Length 3.5-4 mm.

Head, excluding the mandibles, considerably longer than broad, as broad behind as in front, with subparallel sides and rounded posterior corners; occipital border with a distinctly raised edge. Eyes large, with impressed orbits, a little in front of the middle of the head. Mandibles rather weak and flat, with minutely denticulate blades and only two teeth, which are small and apical. Clypeus convex in the middle, with rounded anterior border, feebly and sinuately notched in the middle. Antennal scapes extending about  $\frac{1}{3}$  their length beyond the posterior corners of the head; club 3-jointed, first and second funicular joints longer than broad, joints 3-8 as broad as long. Pro- and mesonotum forming a single hemispherical mass, without a depression at the promesonotal suture. Mesoepinotal depression broad and very deep, owing to the peculiar structure of the epinotum, which is raised to form a prominent rounded ridge on each side terminating at the anterior border of the segment in an ear-like lobe. These ridges run down onto the declivity of the epinotum, and are separated by

a rather deep groove. In profile the epinotum is rounded, with a scarcely perceptible angle between the base and declivity. Metasternal angles sharp and compressed. Petiole with long peduncle, a minute anteroventral tooth and a large, rounded, anteroposteriorly compressed node, which has a deeply concave anterior and straight and more abrupt posterior slope. Postpetiole broader than the petiole, rounded above and slightly compressed anteroposteriorly; at its anteroventral border it has a low, rounded tubercle instead of a tooth.

Mandibles and clypeus subopaque, very minutely and indistinctly punctate. Remainder of body smooth, shining and very sparsely punctate.

Hairs long, suberect, moderately abundant, yellow, covering the body, legs and antennal scapes; pubescence confined to funiculi.

Piceous; mandibles, clypeus, cheeks, antennae, legs, border of first and whole of the remaining gastric segments, reddish yellow; neck, pleuræ, epinotum and ventral portions of petiole and postpetiole deep red.

Described from four workers taken at Córdoba. This differs from all the other described species of *Megalomyrmex* in its very small stature, the structure of the pro- and mesonotum, and especially in the mandibles, which somewhat resemble those of *Gnamptogenys* and *Leptogenys* s. str. and probably represent an adaptation to feeding on soft-bodied insects, such as termites and larvæ. It may be advisable to make *M. silvestrii* the type of a new subgenus, but the various species of the genus are so imperfectly known that I hesitate to do this. The workers of the known species, except *M. latreillei* Emery, which seems to be synonymous with *M. bituberculatus* Fabr., may be identified with the aid of the following table:

1. Mandibles rather feeble and flat, their blades minutely denticulate, with only two teeth, which are apical; promesonotal suture not impressed, very indistinct; color piceous, with yellow legs. Length 3.5-4 mm. Mexico . . . . . *silvestrii* sp. nov.

Mandibles more robust and convex, with large, subequal teeth; promesonotal suture marked by a distinct impression . . . . . 2

2. Mandibles opaque, striated, with 6 teeth; antennal club 4-jointed. Color testaceous yellow, legs paler. Length 4 -- 4.75 mm. Costa Rica. , . . . . . *modestus* Emery.

Mandibles shining, not striated; with 5 teeth; antennal club 3-jointed . . . . . 3

3. Anterior slope of petiole seen in profile nearly straight. . . 4

Anterior slope of petiole seen in profile deeply concave . . . 5

4. Color reddish testaceous; mesonotum convex and rounded.

Length 7-9 mm. Bolivia, Peru. . . . . *balzani* Emery.

Color yellow; mesonotum flat and horizontal, not higher than the base of the epinotum. Length 8 mm. Brazil . . . *duckei* Forel.

5. Occipital margin of head with an indistinctly raised border; epinotum with a deep median excavation behind bordered on each side by a large, rounded, laterally compressed tubercle. Color rufo-testaceous, with darker gaster. Length 6-8 mm. Costa Rica.

*foreli* Emery.

Occipital margin of head with a distinct raised border; epinotum with smaller, blunter and not laterally compressed tubercles or none at all . . . . . 6

6. Epinotal tubercles absent; longitudinal depression very faint or absent; . . . . . 7

Epinotal tubercles present; longitudinal depression distinct. . . 8

7. Color rufo-testaceous; petiolar peduncle rather short, with a small, acute, anteroventral spine; epinotum with a faint longitudinal depression. Length 8-9.5 mm. Colombia, Panama, Costa Rica.

*leoninus* Forel.

Color piceous; petiolar peduncle longer, without anteroventral spine; epinotum without a trace of a longitudinal depression. Length 10 mm. Peru. . . . . *staudingeri* Emery.

8. Piceous; both petiole and postpetiole without anteroventral teeth; epinotum with a pair of distinct tubercles and a distinct longitudinal groove. Length 8 mm. Brazil. . . . . *nasutus* Forel.

Rufo-testaceous. . . . . 9

9. Basal surface of epinotum bordered with two high, ear-like lobes, between which it is deeply concave; petiolar node very large, antero-posteriorly compressed and scale like, its peduncle short. Length 8-8.5 mm. Surinam . . . . . *emeryi* Forel.

Basal surface of epinotum with two blunt ridges terminating behind in blunt tubercles and separated by a shallow longitudinal depression; petiolar node not enlarged and only moderately compressed antero-posteriorly, its peduncle long. Length 7-8 mm. Brazil.

*bituberculatus* Fabr.

# 18. — Tetramorium (Tetrognus) simillimum Fabr.

Several workers from Córdoba. This common tropicopolitan ant has not, I believe, been recorded from Mexico heretofore.

19. — **Wasmannia auropunctata** Roger var. **rugosa** Forel

Several workers and a dealated female from Cuernavaca in Morelos, a locality in which I also took this variety several years ago.

**Subfamily Camponotinæ.**

20. — **Rhizomyrma exsanguis** sp. nov.

*Worker.* Length 1.4 — 1.6 mm.

Resembling the other species of the genus, *Rh. pachycera* Emery, *decedens* Mayr, *goeldii* Forel and *smithi* Forel, but decidedly smaller. Mandibles long, slender, uniformly curved, with parallel borders and three acute, oblique teeth. There is absolutely no indication of a basal as distinguished from an apical mandibular border, as there is in all of these species. Antennae 8-9-jointed; scapes reaching almost to the posterior corners of the head; all the funicular joints, except the first and second, much broader than long. Eyes extremely minute. Thorax, petiole, gaster and legs as in *goeldii*.

Whole body, including the mandibles subopaque or faintly shining

Hairs very sparse, pale yellow, present only on the clypeus, mandibles and anal segments of the gaster. Body and appendages covered with short, pale and not very abundant pubescence.

Pale yellow throughout, teeth of mandibles brown, eyes black. Three specimens from Jalapa.

21. — **Prenolepis steinhelli** Forel.

Several workers from Orizaba agree very closely with typical Costa Rican specimens received from Professor Forel. Two males and two females from Jalapa seem also to belong to this species.

22. — **Camponotus planatus** Roger.

Several major and minor workers from Orizaba.

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