

Article VII.—THE ANTS OF JAMAICA.

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During the winter of 1905–06 Mr. Alexander E. Wight of Wellesley Hills, Mass., collected a number of Jamaican ants for the American Museum of Natural History. The collection comprises 22 different forms, 16 of which have not been recorded hitherto from the island. These all belong to known species, but three of them represent new varieties and one a new subspecies. In order to make the list of Jamaican ants as complete as possible, I have included in the following pages also the records of Forel and Ern. André, and have added a few from specimens that have found their way into the Museum collection from different sources. Of the 40 enumerated forms, 9, or nearly 25 per cent., are well-known cosmopolites, and nearly half of the remainder are widely distributed through the West Indies and adjacent South and Central American countries. The Jamaican fauna, so far as known, differs from that of Porto Rico in possessing large species of *Camponotus* (*C. hannani*) of the *abdominalis* group, and in lacking species of *Macromischa*, a genus represented in Cuba, San Domingo, Porto Rico, Culebra, St. Thomas and the Bahamas. The discovery by Mr. Wight of a *Rhopalothrix* in Jamaica adds a new and very interesting genus to the Antillean fauna.

Family FORMICIDÆ.

Subfamily PONERINÆ.

1. *Ectatomma* (*Holcoponera*) *strigatum* (*Norton*).—Kingston (T. D. A. Cockerell, Ern. André), Port Antonio (Wight). Numerous workers from five colonies, with the following notes: "No. 30. Jan. 14. Procession on ground; ants slow-moving; when frightened they hide beneath bits of earth, stone, etc. No. 36. Feb. 6. Procession on ground near mouth of Bog River. No. 45. Feb. 23. Procession on mud, by side of brook; an inactive species. No. 49. Feb. 26. Near mouth of Bog River, nesting under a stone. No. 59. May 3. Procession on the retaining wall of the port."

2. *Platythyrea punctata* (*F. Smith*).—Kingston (Forel).

3. *Odontomachus haematodes* (*L.*).—Kingston (T. D. A. Cockerell, Ern. André); Port Antonio (Wight). Workers from three colonies.

Subfamily MYRMICINÆ.

4. *Pseudomyrma delicatula* Forel.—Kingston (Forel). This species is very closely related to *Ps. flavidula* F. Smith.

5. *Pseudomyrma delicatula* var. *capperi* Forel.—Kingston (Forel).

6. *Pseudomyrma elongata* Mayr.—Port Antonio (Wight). Seven workers taken "from a procession on a tree" have the head and thorax of a rich brown color, paler than in the form which I have recorded from the Bahamas.

7. *Monomorium destructor* (Jerdon).—Kingston (T. D. A. Cockerell, Ern. André).

8. *Monomorium omnivorum* (L.).—This insect which is mentioned by Browne (Nat. Hist. Jamaica, 1756, p. 440) and other early authors (Linnaeus, Fabricius, Gmelin, Christ and Latreille) under the name of *Formica omnivora*, is referred by Dalla Torre (Catalog. Hymen., VII, 1893, p. 68) to the genus *Monomorium*, on the authority of Emery "in litteris." None of the other myrmecologists, who have examined large collections from Tropical America, seems to have recognized the species. Browne's description is too brief and imperfect to throw any light on the subject. C. H. Tyler Townsend stated in the 'Jamaica Post,' Aug. 25, 1893, that this insect is known as the "Tom Raffles" ant, because it was brought to the island from Cuba in October, 1762, by a man of that name, but this date cannot be correct if he refers to the insect described by Browne. Unfortunately Townsend merely mentions the species under its old name *Formica omnivora*, thus leaving the problem of its identity unsolved.

9. *Monomorium floricola* (Jerdon).—Port Henderson (Prof. L. H. Clarke); Hope Bay (Wight). Several workers with the note "No. 54. March 8, procession up and down cocoanut palm."

10. *Monomorium carbonarium ebeninum* Forel.—"St. Margaret's Bay. No. 41. Feb. 18. Procession on stones near railway station, at sea-level. Port Antonio; No. 44. Feb. 23. Nesting among roots of orchid on tree." (Wight.)

11. *Cardiocondyla emeryi* Forel.—Kingston (C. Gagzo, Forel).

12. *Solenopsis geminata* (Fabr.).—Kingston (T. D. A. Cockerell, Ern. André); Port Antonio (Wight).

13. *Solenopsis azteca* Forel var. *pallida* Wheeler.—Port Antonio (Wight). Numerous workers from two colonies with the notes: "No. 24. Bank of Bog River, feeding on fungus on cocoa-nut stump; No. 58. Apr. 28, nesting in rotting log." These specimens agree perfectly with the types of the variety from Porto Rico.

14. *Pheidole fallax* Mayr.—Kingston (Forel).
15. *Pheidole megacephala* (Fabr.).—Kingston (Forel).
16. *Pheidole punctatissima jamaicensis* subsp. nov. "Valley, off shore road, 2½ miles west of Port Antonio. Nesting in rotting log." (Wight.)
The soldier of this form is very similar to that of the subsp. *insulana* Wheeler from the Bahamas, but differs in the following characters: The rugæ on the front and sides of the head are stronger, the extreme posterior corners are less shining, the pronotum is coarsely reticulately rugose above, the lateral conules of the postpetiole are sharper and more acuminate, and the head, thorax and pedicel are dark brown in color. The coloration of the worker, too, is much deeper than in *insulana*.
17. *Pheidole radoszkowskii* Mayr var. *opacissima* Forel.—Willard House, Kingston (Forel).
18. *Pheidole subarmata* Mayr.—Port Antonio (Wight). Several workers with the note: "Dec. 22. Nest in path, with small mound of particles of earth." These workers are pale in color like those of the typical form of the species.
19. *Cre mastogaster vicina* Ern. André.—Moneague (T. D. A. Cockrell; Ern. André).
20. *Cre mastogaster vicina* var. *wighti* var. nov.—St. Margaret's Bay. "Feb. 26. Procession on ground in woods." (Wight.) Several workers which agree well with André's description of *C. vicina* except in color. The head, thorax and pedicel are dark chestnut brown, the legs and antennæ a little paler, the mandibles yellow, the gaster black. The typical form has "the head light brownish red; the antennæ, thorax and legs sordid reddish yellow; the gaster more or less deep chestnut brown; sometimes the head is lighter and of the same color as the thorax." Perhaps a variety of this ant still darker than the variety *wighti* exists in Jamaica and may be the one described as "formica minor nigerrima sylvatica, abdomine triangulari," by Sir Hans Sloane (*A Voyage to the Islands of Madera, Bardadoes, Nieves, St. Christopher's and Jamaica, etc.* 1725, II, p. 222).
21. *Cre mastogaster victima* (F. Smith) var. *steinheili* Forel.—Kingston, "in twigs" (Forel); Port Antonio (Wight). A single winged female, "No. 29. Jan. 7. Flew to light in evening."
22. *Tetramorium guineense* (Fabr.).—Road to Shotover, 2 miles west of Port Antonio, "nest in ground under a piece of wood." (Wight.)
23. *Wasmannia auropunctata* Roger.—Port Antonio (Wight). Numerous workers of the typical, smooth, Antillean form of this species, from two colonies, with the notes: "No. 5, Nov. 29, nest in dead bark on ground, under stone near sea-shore; No. 37, Feb. 6. Nest among dead leaves."
24. *Rhopalothrix simoni* Emery var. *wighti* var. nov.—Road to Shot-

over, 2 miles west of Port Antonio, about 500 feet altitude (Wight). "The ants, which were gathered with their brood in a cavity on the under side of a stone, acted dazed when the stone was turned and, when they were more disturbed, simulated death." The specimens which are all workers, agree closely with Emery's description of *R. simoni* from Venezuela but are decidedly larger (2 mm.). This is the first *Rhopalothrix* to be taken in the West Indies, all the other members of this singular genus having been collected on the adjacent continent.

25. *Atta* (*Trachymyrmex*) *jamaicensis* Ern. André.—Jamaica (Fox, Ern. André).

26. *Cyphomyrmex foxi* Ern. André.—Jamaica (Fox, Ern. André).

27. *Cyphomyrmex rimosus minutus* Mayr.—Lowlands near Bog River, Port Antonio (Wight). Two dealated females and five workers with the note: "No. 21, under bark of cocoanut log."

Subfamily DOLICHODERINÆ.

28. *Tapinoma melanocephalum* Fabr.—Kingston (T. D. A. Cockerell, Ern. André); Port Antonio (Wight). Numerous workers from two colonies with the notes: "No. 7. Nov. 30, under bark of a tree; No. 22. Dec. 26, procession on piazza of house."

29. *Forelius maccooki* (Forel).—Kingston (Forel).

Subfamily CAMPONOTINÆ.

30. *Brachymyrmex minutus* Forel.—Mouth of Rio Grande River (Wight). Several workers, with the note: "No. 47. Feb. 26, under stone."

31. *Brachymyrmex heeri* Forel var. *obscurior* Forel.—Mouth of Rio Grande River (Wight). Several workers with the note: "No. 50. Feb. 27, under stone."

32. *Prenolepis fulva* Mayr.—Port Antonio (Wight). Numerous workers from two colonies, with the notes: "No. 27. Jan. 7, attending aphids on shrub. No. 28. Jan. 7. Running in a partly covered passage up trunk of cocoanut palm."

33. *Prenolepis longicornis* (Fabr.).—Port Antonio (Wight). Numerous workers with the note: "No. 46. Feb. 25. Procession in dwelling; movements very rapid."

34. *Camponotus capperi* Forel.—Jamaica (Capper, Forel). The worker of the type of this beautiful species has the epinotum sharply angular in profile, the gaster yellowish brown, with a narrow dark brown band

across the posterior portion of each segment. The pilosity and pubescence are long and abundant, especially on the gaster.

35. *Camponotus capperi corticalis* Forel.—Kingston, Botanical Garden (Forel). This subspecies has the gaster concolorous with the head and thorax, and the epinotum, humeri and posterior corners of the head are much less angular in the worker major.

36. *Camponotus capperi corticalis* var. *subdepilis* var. nov.—Port Antonio (Wight). "May 3. Procession on the retaining wall." A worker major, media and six minor workers agreeing closely with types of *corticalis* in color, but the white hairs on the body are much fewer, more erect and less flexuous. On each gastric segment they are reduced to three sparse rows. The pubescence is like that of *corticalis*.

37. *Camponotus fugax* Forel.—Kingston, Botanical Garden (Forel).

38. *Camponotus conspicuus* F. Smith.—Kingston (Forel); Port Henderson (Prof. L. H. Clarke).

39. *Camponotus hannani* Forel.—Kingston, Botanical Garden (Forel); Port Antonio; Shotover (Wight). Major workers, mediae and minor workers from five colonies, with the following notes: "No. 18. Dec. 20. Golden Vale road; running on cocconut log; No. 10. Dec. 7, ants huddled together in horizontal hole near base of a telephone pole; No. 25. Jan. 5, crawling on tree; No. 26. Jan. 5, nest in decayed fence post; ants very fierce; No. 56. March 20; Shotover, East bank of Rio Grande, ants in rotting log, fierce and rapid of movement." All of the specimens agree very closely with types from Kingston received from Prof. Forel. This is in all probability the species described by Sir Hans Sloane (l. c. p. 222) as "formica major rubra."

40. *Camponotus hannani willardi* Forel.—Jamaica (Capper, Forel, Fox); Moneague (Dr. F. C. Paulmier). Forel described only the minor worker and media of this subspecies. A soldier from the Philadelphia Academy collection (Fox) and four soldiers, a media and worker collected by Dr. Paulmier enable me to add the following notes: The hairs on the body are more erect and quite as abundant as in the typical *hannani*, but much more abundant on the inferior surface of the head and much longer on the antennal scapes and legs. The surface of the body is more shining in all the worker forms. As Forel has pointed out, the head of the worker minor is much shorter, broader and less rounded behind, with nearly straight posterior border.