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The Ants (Hym. Formicidae) **WILLIAM L. BROWN**
 By HORACE DONISTHORPE, F.Z.S., F.R.E.S., etc.

MAURITIUS is an Island in the Indian Ocean and lies 550 miles east of Madagascar. It is one of the three Mascarene Islands, the other two being Reunion or Bour Bon, and Rodriques. Somewhat triangular in shape, it is 36 miles long and 23 miles in breadth.

The island is of volcanic origin, and the rocks consist of basalt and lavas. The rivers are small, which in the dry season, are little more than brooks; but in the wet season they become raging torrents. The principal stream, Grand Reivère, is only 10 miles long.

In the south there is a very deep lake, Grand Bassin, the extinct crater of an ancient volcano.

The island is surrounded by coral reefs, and possesses beautiful scenery and picturesque mountains; 2711 feet above the sea is the highest level. Le Pouce mountain is so called because it is supposed to resemble the human thumb in shape.

The scenery is delightfully described by Bernardin Saint-Pierre in his charming story 'Paul et Virginie.'

There are extensive plains in the interior.

Mauritius was unknown until the year 1505, when it was discovered by a Portuguese navigator, one Mascarenas. There appear to have been no inhabitants before that time. Little use was made of the island until 1598, when the Dutch took possession, and named it "Mauritius" in honour of their Count, Maurice of Nassau.

In 1715-1767 the French Government assumed control, and re-named it "Ile de France." In 1810 it was captured by the British, and has remained a British Colony to this day; being again called Mauritius.

Being an oceanic island of small size, the fauna is very limited in extent. There are a certain number of mammals and reptiles, chiefly introduced; and the birds are similar to those of Madagascar. Of extinct animals, several species of large fossil tortoises have been discovered, unlike any present known genera. The remains of two or three birds have also been found; chief of these, of course, being the celebrated Dodo (*Didus ineptus*)—immortalized in Lewis Carrol's 'Alice's Adventures in Wonderland'; dear to all children's hearts.

Of the entomological fauna, a certain amount of work has been done with the Coleoptera, Lepidoptera and Orthoptera; but on the Hymenoptera, practically nothing.

Of ants, four species are recorded from Mauritius in "Les Formicides de Madagascar" in Grandidier, Histoire Physique, Naturelle et Politique de Madagascar, vol xx. (1891). These are:—

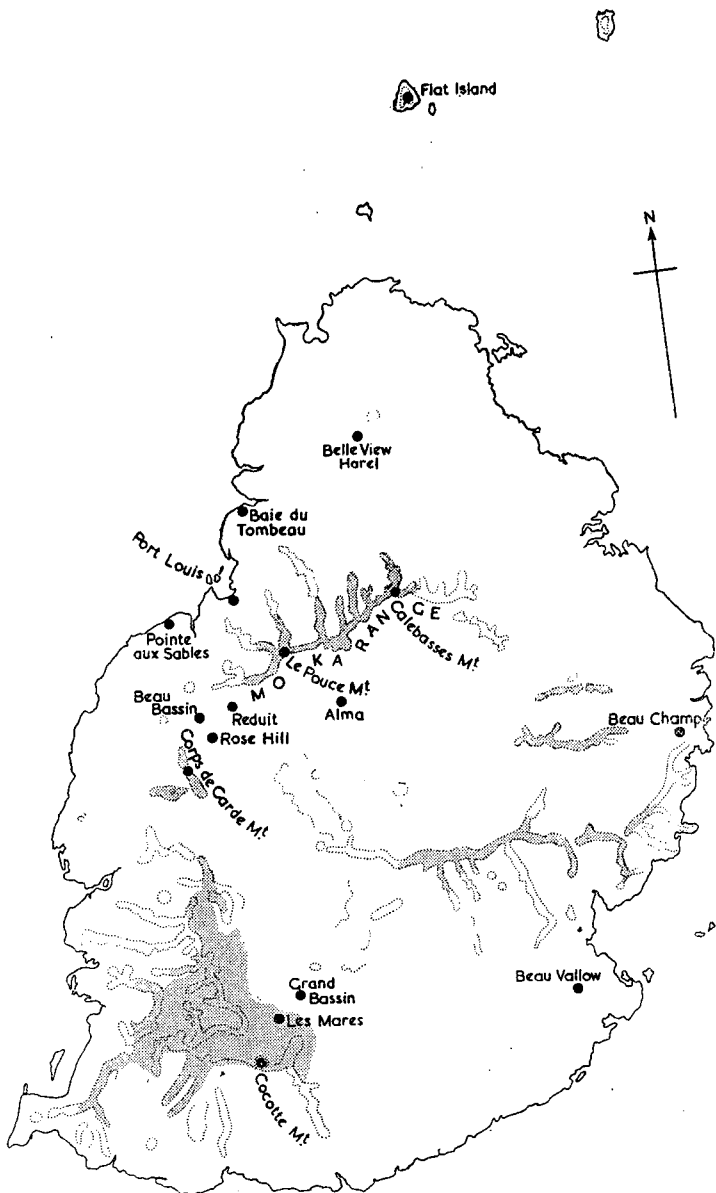
Camponotus sericeus F., *C. aurosus* Roger, *Colobopsis cylindrica* F., and *Leptogenys maxillosa* F. Smith.

In a small paper on the ants of Réunion, "Fourmis de l'Île de la Réunion," Ann Soc. Ent. Belg. xxxix. p. 49 (1895), Forel enumerates ten forms as follows:—1. *Prenolepis bourbonica* Forel; 2. *P. longicornis* Latr.; 3. *Brachymyrmex patagonicus* Mayr var. *cordemoyi* Forel; 4. *Plagiolepis alluaudi* Emery; 5. *P. longipes* Jerd.; 6. *Technomyrmex albipes* F. Smith; 7. *Tapinoma melanocephalum* F.; 8. *Leptogenys maxillosa* F. Smith var. *vinsonella* Dufour; 9. *Monomorium floricola* Jerd.; 10. *Pheidole megacephala* F. v. *pictata* Forel. (I have quoted the names as used by Forel; not giving those as at present used.)

The following list deals with a number of ants sent to me to identify, by Mr. Raymond Mamet of Mauritius. They were almost entirely taken by himself on that island. There are two new genera present (which I have named *Dodous* and *Ireneopone*) and eight new species, which are probably endemic. The rest of the list consists of certain well known cosmopolitan species, and ants which have occurred in Africa, Madagascar, the Seychelles, etc.

I give the known distribution to each species, and also the numbers with which Mamet's tubes containing his different captures are marked. I also recapitulate any remarks he has made on the same. Mr. Mamet has kindly supplied me with descriptions of the localities where his ants have been collected. He also annexes a map on which these localities are marked; both of which are reproduced here (for map see opposite).

"I would like to describe, for your benefit, the localities mentioned in the above list and where the ants have been collected. These localities have been marked on a map which I am annexing to this letter,



Sketch-map of Mauritius showing the mountain ranges.
 Places of collection marked ●.
 Areas still under indigenous forests shaded.

“*Rose Hill* and *Beau Bassin* are sister-towns, situated at 923 feet and 737 feet altitude, respectively, in a densely populated area. The rainfall varies between 60 and 75 inches, and the mean annual temperature is about 22° C. Most of the species of ants collected in these localities are probably of introduced origin.

“*Le Pouce Mt.* This forms part of the Moka range of mountains and is the junction of several ridges. This mountain rises fairly steeply up to 2000 feet altitude, and then gently to 2500 feet, forming a wide plateau of about 80 acres. The mountain then rises abruptly to the summit and there reaches 2661 feet altitude. Most of the collections have been made on the plateau, which is still clad with indigenous vegetation. It can be surmised that the ants collected in this locality may reveal to be new to Science. No meteorological data are yet available for this locality, since they have apparently never been studied. The climate on the plateau is fairly cool and humid.

“*Corps de Garde Mt.* forms an isolated massif (2358 feet altitude) in the western part of the Island. The climate there is much drier than on the Pouce Mountain. It is probable that ants collected there may belong to species not found in other collection centres.

“*Cocotte Mt.* is a narrow ridge 2450 feet altitude in the region of Les Mares (southern region of the island). The rainfall is very high, exceeding 175–200 inches in some seasons. It is the coolest part of the island, and during the winter months the temperature may frequently fall to 10° C.

“*Les Mares* has an altitude of 2200 feet, with an annual rainfall of about 125 inches and a mean annual temperature of about 20° C.

“*Calebasses Mt.* is situated near the north-western end of the Moka range of mountains. The region is still clad with indigenous vegetation and the climate bears a vague resemblance to that of the Pouce Mountain.

“*Baie du Tombeau* and *Pointe aux Sables* are places situated on the north-western coast of the island. The rainfall is low (about 20 inches per annum) and the temperature fairly high (about 25° C. as mean annual).

“*Reduit* is situated at 1030 feet altitude and is a fairly cool region; mean annual temperature 21° C.; the annual rainfall varies from 60 to 70 inches.

"Grand Bassin is a small lake at 2200 feet altitude, in the region of Les Mares. The lake covers an area of about 25 acres.

"Ile Plate or Flat Island is a small island of an area of about 626 acres, situated on the north of Mauritius. The fauna of this island may prove to be a little distinct from that of Mauritius.

"Beau Champ, Beau Vallon and Belle Vue (Harel) are sugar cane estates."

Formicidæ Stephens.

Subfamily *PONERINÆ* Lepeletier.

Tribe *LEPTOGENYINI* Forel.

Leptogenys maxillosa F. Smith v. *vinsonella* Dufour, Ann. Soc. Ent. France (21) iv. p. 210 (1864).

Distribution.—Réunion; Seychelles.

No. 87. 3 ♂♂. Collected in Mauritius (no data), R. Mamet.

Subfamily *MYRMICINÆ* Lepeletier.

Tribe *PHEIDOLINI* Emery.

Pheidole (Pheidole) megacephala Fabricius, Ent. Syst. ii. p. 361 (1793). Cosmopolitan.

No. 2. 30 ♂♂. On trees, Le Pouce Mountain, 24. xii. 1942. No. 17. 2 ♀♀, 3 21 21, 48 ♂♂, larvæ and pupæ, Corps de Garde Mountain, 17. i. 1944. No. 21. 30 ♂♂, 1 21, on tree trunk, Corps de Garde Mountain, ditto, ditto. No. 23. 24 ♂♂ and larvæ, nesting under loose bark at foot of tree, ditto, ditto. No. 25. 85 ♂♂, collected in laboratory at Reduit, 14. iv. 1942. "A troublesome species, which sometimes feeds on dry, as well as on live, insects, reared for life-cycle, etc. Sometimes found in great numbers." No. 33. 1 ♂, 40 ♂♂, 4 21 21, Floreal, ii. 1942. "Nesting in soil in pot." No. 49. 25 ♂♂, 2 21 21. Reduit, 25. iv. 1942. No. 50. 6 ♀♀, 4 ♂♂, 40 ♂♂, 16 21 21, larvæ and pupæ, Reduit, 28. xii. 1944. No. 51. 4 ♀♀, 80 ♂♂, 20 21 21, Reduit. "Attending coccid *Trionymus sacchari*," 28. x. 1944. No. 54. 4 ♂♂. "Collected in sugar cane fields at Belle Vue (Harel)." No. 60. 30 ♂♂, collected in sugar cane fields, 1944. No. 89. 8 ♂♂. Corps de Garde Mountain, 26. xii. 1944. No. 90. 12 ♂♂, ditto, ditto. No. 92. 2 ♀♀, 3 ♂♂, 23 ♂♂, 3 21 21. Corps de Garde Mountain. "Nesting under a large stone in a very dry place." No. 102. 1 ♂ in miscellaneous lot. Mauritius.

Pheidole (Pheidole) megacephala F., subsp. *pusilla* Heer v. *scabrior* Forel, Hist. Nat. Madagascar, xx. p. 178 (1891).

Distribution.—Madagascar; Mascarenes; Seychelles.

No. 30. 2 ♀♀, 4 2|2|, 7 ♂♂, larvæ and pupæ. Cocotte Mountain, 24. i. 1942. No. 32. 25 ♂♂, 10 2|2|. Cocotte Mountain. "Nesting under a stone," 24. i. 1942. No. 34. 75 ♂♂, 12 2|2|, larvæ and pupæ; ditto, ditto.

I am not quite satisfied with the identification of this variety. They vary somewhat amongst themselves, and Forel's description does not quite agree with ♂♂ named by himself in the B.M. Coll.; in which no 2|2| are present.

Pheidole (Pheidole) anastasioi Emery v. *cellarum* Forel, Bull. Soc. Vaud. Sci. Nat. xlv. p. 55 (1908).

Costa Rica; and in hot-houses. It has been found in orchid and hot-houses at Kew; Dublin; Copenhagen; Zurich; Dresden; Brussels, etc.

No. 102. 1 ♂ in miscellaneous lot from Mauritius.

This individual agrees exactly with specimens from Kew, named *cellarum* by Forel himself.

Pheidele sp?

No. 74. 25 ♂♂, Rose Hill, 10. xii. 1945.

These are too small for *P. megacephala* F. They may possibly belong to the var. *scabrior* Forel.

Tribe CARDIOCONDYLINI Emery.

Cardiocondyla mauritia Donisthorpe, Ann. & Mag. Nat. Hist. (11) xii. p. 776 (1945).

4 ♂♂ in miscellaneous lot from Mauritius.

Tribe CREMATOGASTERINI Forel.

Creमतogaster (Acrocœlia) sewellei Forel v. *dentata* Forel, Hist. Nat. Madagascar, xx. (2) p. 196 (1891).

Madagascar.

No. 84. 5 ♂♂, Les Mares, 15. i. 1938.

Tribe SOLENOPSISIDINI Forel.

Dodous trispinosus Donisthorpe, Trans. R. Ent. Soc. Lond. 1941*.

No. 6. 40 ♂♂, larvæ and pupæ, nesting under a flat stone, Cocotte Mountain, 6. ii. 1943. "A curious species

* Not yet published but will be out this year.

which, when disturbed, simulates death." No. 26. 2 ♀♀, 30 ♂♂, larvæ and pupæ, ditto, ditto.

Monomorium (Monomorium) floricola Jerdon, Madras Journ. Lit. Sci. xvii. p. 107 (1851).

Cosmopolitan.

No. 7. 32 ♂♂, Rose Hill, in dry soil, iv. 1943. No. 16. 4 ♂♂, Le Pouce Mountain, 24. xii. 1942. "Caught whilst beating branches for other insects." No. 36. 75 ♂♂, Beau Bassin, 2. vi. 1942. "Behaves sometimes as a household pest, feeding on sweets, bread, etc. Usually in dry places. Stings."

Solenopsis mameti Donisthorpe, Ann. & Mag. Nat. Hist. (11) xii. p. 777 (1945).

No. 3. 9 ♂♂, Le Pouce Mountain, 13. xi. 1943. No. 11. 5 ♂♂, Le Pouce Mountain, 24. xi. 1942. "Caught whilst beating branches for other insects." No. 27. 4 ♀♀, 45 ♂♂, larvæ and pupæ. Cocotte Mountain, 27. xii. 1941. "Nesting under stone." No. 93. 3 ♀♀, 54 ♂♂. Corps de Garde Mountain, 26. xii. 1944. "Nesting under a stone in a shady place." Four specimens of a Bethyloid, probably a new genus and parasitic on the ants, No. A, were taken in the nest.

Solenopsis geminata Fabricius, Syst. Piez. p. 423 (1805).

Tropical America. Introduced into Africa.

No. 38. 44 ♂♂. Baie du Tombeau, 1. v. 1942. No. 39. 50 ♂♂, 4 2|2|, collected in sugar cane fields at Beau Vallon, 20. vi. 1942. "A species sometimes met with in fair numbers in cane fields; probably a predator of young caterpillars and of insect eggs." No. 58. 1♀, 25 ♂♂, 10 2|2|, collected in sugar cane fields, 1942. No. 64. 25 winged ♀♀, 1 2|, Beau Bassin, 5. v. 1942. No. 65. 9 winged ♀♀, 1 2|, Reduit, 14. iv. 1942. No. 66. 50 winged ♀♀, Beau Bassin, 28. iv. 1942. No. 67. 2 winged ♀♀, 26 ♂♂, 4 2|2|, Reduit, 14. iv. 1944.

Tribe TETRAMORIINI Emery.

Triglyphothrix mauricei Donisthorpe, Ann. & Mag. Nat. Hist. (11) xii. p. 778 (1945).

No. 48. 3 ♂♂, Rose Hill, 1942.

Tetramorium simillimum F. Smith, List Brit. Anim. Brit. Mus. 6. Aculea. p. 118 (1851).

Cosmopolitan.

No. 5. 18 ♀♀, Rose Hill, 1942. "In dry soil."
No. 7. 32 ♀♀, ditto, ditto, iv. 1943.

Ireneopone gibber Donisthorpe, Ent. Mo. Mag. lxxxii. pp. 242-43 (1946).

No. 72. 2 ♀♀, Calebasses Mountain, 22. x. 1944. No. 82. 1♂, Le Pouce Mountain, 7. xii. 1940.

Tribe DACETINI Forel.

Strumigenys (Cephaloxys) raymondi Donisthorpe, Ann. & Mag. Nat. Hist. (11) xii. p. 779 (1945).

No. 8. 15 ♀♀, Le Pouce Mountain, 24. xii. 1942. "Nesting in old rotten tree stump." No. 12. 36 ♀♀ and larvæ, ditto, ditto, 13. xi. 1943. No. 19. 10 ♀♀. Corps de Garde Mountain, 17. i. 1944. "Caught on tree trunk." No. 20. 55 ♀♀, larvæ and pupæ, ditto, ditto. No. 28. 18 ♀♀. Cocotte Mountain, 24. i. 1942.

Subfamily DOLICHODERINÆ Forel.

Tribe TAPINOMINI Emery.

Iridomyrmex vinsoni Donisthorpe, Ann. & Mag. Nat. Hist. (11) xii. p. 781 (1945).

No. 83. 4 ♀♀, Les Mares, 15. i. 1938.

Technomyrmex detorquens Walker, Ann. Soc. Nat. Hist. (3) iv. p. 372 (1859); Donisthorpe, Ann. & Mag. Nat. Hist. (S.10) ix. p. 575 (1932). *T. albipes* F. Smith, Journ. Proc. Linn. Soc. Zool. vi. p. 38 (1861).

Cosmopolitan.

No. 18. 14 ♀♀. Corps de Garde Mountain, 17. i. 1944. "Nesting under a stone." No. 40. 35 ♀♀, 5 winged ♀♀, Reduit, 14. iv. 1942. No. 55. 15 ♂♂, Reduit, 29. iv. 1942. No. 56. 30 ♀♀, Baie du Tombeau, 1. v. 1942. "Fairly common in this locality." No. 61. 125 ♀♀, larvæ and pupæ, Reduit, 1944. No. 62. 30 ♀♀, numerous callows, pupæ, Reduit, 14. xi. 1944. No. 63. 40 ♀♀, pupæ, Port Louis, 29. v. 1942.

Subfamily FORMICINÆ Lepeletier.

Tribe PLAGEOLEPIDINI Forel.

Anoplolepis longipes Jerdon, Madras Journ. Lit. Sci. xvii. p. 122 (1851).

Cosmopolitan.

No. 31. 15 ♀♀, Alma, 7. iv. 1942. "Collected in sugar cane fields. A very active species, which apparently feeds on bruised canes." No. 59. 50 ♀♀, sugar cane fields, 1942.

Phagirolepis madecassa Forel, Hist. Nat. Madagascar, xx. (2), p. 241 (1892).

Madagascar; Seychelles.

No. 4. 30 ♀♀, Le Pouce Mountain, 13. xi. 1943.
No. 71. 1 del. ♀, 15 ♀♀, Calebasses Mountain, 22. x. 1944.
No. 99. 3 ♀♀, Corps de Garde Mountain, 26. xii. 1945.
"Caught whilst beating trees for other insects." No. 101. 4 ♀♀, ditto, ditto.

Tribe DIMORPHOMYRMICINI Emery.

Brachymyrmex cordemoyi Forel, Ann. Soc. Ent. Belg. xxix. p. 49 (1895).

Réunion; Seychelles.

No. 11. 5 ♀♀, Le Pouce Mountain, 24. xii. 1942. "Caught whilst beating branches for other insects." No. 13. 42 ♀♀, Rose Hill, 1942. "In dry soil." No. 14. 26 ♀♀, Le Pouce Mountain, ditto, ditto, no. 11. No. 15. 30 ♀♀, ditto, ditto, no. 13. No. 17. 2 winged ♀♀, Corps de Garde Mountain, 17. i. 1944. Apparently taken in a nest of *Pheidole megacephala* F. No. 29. 2 winged ♀♀, 5 ♀♀, larvæ, Cocotte Mountain, 27. xii. 1942. "Found under loose bark." No. 69. 3 winged ♀♀, 10 ♀♀, Calebasses Mountain, 22. x. 1944. No. 75. 10 ♂♂, Rose Hill, 10. xii. 1945. "Attracted by light." No. 96. 1 del. ♀, 7 ♀♀, Corps de Garde Mountain, 26. xii. 1945. "This species forms very small colonies nesting under stones. A colony may consist of about 30 ♀♀ only." No. 97. 1 del. ♀, 10 ♀♀, Corps de Garde Mountain. No. 98. 5 ♀♀, Corps de Garde Mountain, 26. xii. 1945. "Collected whilst beating trees for other insects."

Tribe CAMPONOTINI Forel.

Camponotus (Tanæmyrmex) maculatus Fabricius, Spec. Ins. i. p. 491 (1781).

Tropical East Africa.

No. 77. 1 del. ♀, Cocotte Mountain, 24. i. 1942. No. 76. 2 ♀♀. "Collected at Saint Denis Réunion Island," ii. 1935.

Camponotus (Myrmosericus) aurosus Roger, Berlin Ent. Zeitschr. vii. p. 134 (1863).

Ile Maurice.

No. 22. 4 ♂♂, 10 ♀♀, larvæ, Corps de Garde Mountain, 17. i. 1944. "A species difficult to collect on account of its activity; soldiers being less active, were, for the most part, collected." No. 45. 1 ♂, Le Pouce Mountain, 24. xii. 1942. No. 70. 4 ♂♂, 2 ♀♀, Calebasses Mountain, 22. x. 1944. No. 78. 1 ♂, Calebasses Mountain, 22. xi. 1944. No. 79. 1 ♂, Le Pouce Mountain, 7. xii. 1940. No. 80. 2 ♂♂, Grand Bassin, 29. iii. 1937.

Camponotus (Myrmotrema) grandideri Forel, Bull. Soc. Vaud. Sci. Nat. xvi. p. 115 (1870).

Madagascar; Seychelles.

No. 35. 6 ♂♂, larvæ, Beau Champ, 1942. "Collected in cane fields. A species commonly met with in cane fields, etc." No. 41, 1 del. ♀, Rose Hill, 16. i. 1945. No. 53. 20 ♂♂, 1 pupa, Pointe aux Sables, 30. iv. 1942. "Common on coconut plants." No. 57. 2 ♂♂, Beau Champ, 1942. "Collected in sugar cane fields. A species very commonly met with in cane fields all over the island." No. 68. 1 ♂, Rose Hill, 3. xii. 1945. "Attracted by light." No. 88. 3 winged ♀♀, "Mauritius, no data." No. 100. 6 ♂♂, Corps de Garde Mountain, 26. xii. 1945. "A quick running species. Collected whilst beating trees for other insects."

Tribe LASIINI Ashmead.

Pseudolasius dodo Donisthorpe, Ann. & Mag. Nat. Hist. (11) xii. p. 782 (1945).

No. 81. 24 ♂♂, Le Pouce Mountain, 7. xii. 1940.

Paratrechina longicornis Latreille, Fourmis, p. 113 (1802).

Cosmopolitan.

No. 10. 15 ♂♂, Port Louis, iv. 1943. "Collected at the Customs. In potatoes kept in Examination Room." No. 37. 10 del. ♀♀, Beau Bassin, 5. vi. 1942. "A species somewhat difficult to catch on account of its great activity." No. 52. 1 ♂, 50 ♂♂, larvæ and pupæ, ditto, ditto. No. 73. 50 ♂♂, Rose Hill, 8. xii. 1945. "One of the most difficult species to catch owing to its rapidity. Behaves, sometimes, as a household pest. A sweet-eating species."

Paratrechina (Nylanderia) vividula Nylander, Acta. Soc.
Sci. Fennic. ii. p. 900 (1846).

Cosmopolitan.

No. 23. 24 ♀♀, larvæ, Corps de Grande Mountain,
17. i. 1944. "Nesting under loose bark at foot of tree."
Five ♀♀ of *Pheidole megacephala* F. were present in the same
tube.