# ANTS FROM THE SOCIETY, AUSTRAL, TUAMOTU AND MANGAREVA ISLANDS

# By WILLIAM MORTON WHEELER

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# ANTS FROM THE SOCIETY, AUSTRAL, TUAMOTU, AND MANGAREVA ISLANDS<sup>1</sup>

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#### INTRODUCTION

This paper is a report on a large number of Formicidae courteously sent me for study by Mr. E. H. Bryan, Jr., Curator of Collections in Bernice P. Bishop Museum, Honolulu. Nearly all of the material was collected on the Mangarevan Expedition by Mr. E. C. Zimmerman whose many careful records in the following pages are cited as "(E.C.Z.)". Most of the species, as would be expected, are well known vagrants that have succeeded in establishing themselves as dominant components of the ant fauna on many of the Pacific islands, but the present collection considerably extends the known range of several of these insects to the Austral, Tuamotu, and Mangareva Islands, which were previously "terrae incognitae" to the myrmecologist. The collection, moreover, contains specimens of two new mountain ants, Monomorium (Notomyrmex) rapaënse and Oligomyrmex tahitiensis, of unusual interest to the zoogeographer, since the first belongs to a subgenus and the second to a genus not hitherto known to be represented in Oceania. Notomyrmex is regarded as an antarctic group because it comprises numerous species in southern Australia, New Zealand and New Caledonia and four species in Chili and Patagonia. M. rapaënse is evidently indigenous to Rapa and suggests a former direct connection between this isolated locality and hypothetical Antarctica. O. tahitiensis, though also far removed from the range of its congeners, is of East Indian and Papuan origin, like many of the other Tahitian ants. The exact status of this species cannot be determined without a knowledge of its minute, pale yellow soldiers and workers, and these castes, which are among the smallest of ants, were overlooked by the collector, unless the female and male on which I have had to base the species, were taken at lights or in sweepings. It should not be difficult, however, for some future collector to find complete colonies of

<sup>&</sup>lt;sup>1</sup> Mangarevan Expedition Publication 11.

#### SUBFAMILY PONERINAE

#### Ponera gleadowi Forel variety decipiens Forel.

Austral Islands: Maria Island, northeast islet, altitude 5 ft., Sept. 6, 1934, § (E.C.Z.). Marotiri, southeast islet, altitude 100-200 ft., July 22, 1934, § (E.C.Z.).

The two workers found agree closely with specimens of this variety from the Hawaiian islands.

#### Ponera mumfordi Wheeler.

Marotiri, southeast islet, Sept. 22, 1934, § § (E. C. Z. and F. R. Fosberg), swept from *Bidens* and *Portulacca*; Rapa, Maitua, altitude 600-700 ft., Sept. 10, 1934, § (E.C.Z.), in dead, rotten stump.

The dealäted female (undescribed) measures nearly 3 mm. The head is more rectangular than in the worker, as broad through the eyes as through the posterior corners, the eyes are hairy, unusually large, moderately convex, and very close to the anterior corners of the head. The thorax is conspicuously flattened above, its dorsal surface straight, horizontal and uninterrupted in profile. The petiole is more compressed antero-posteriorly than in the worker, the color is much darker, the head, thorax, and abdomen being dark brown, with the scutellum, metanotum, petiole, terminal gastric segments and in some specimens also the postpetiole paler and more reddish or yellowish. Pilosity and pubescence both on the body and appendages are decidedly longer and more abundant.

#### Ponera perkinsi Forel.

Society Islands: Tahiti, May 27, 1934,  $\$  (L. H. MacDaniels); Papara, Feb. 1927,  $\$  (G. P. Wilder); Maara, March 25, 1926,  $\$  (G. P. Wilder); Arihiri, Pare, March 17, 1934,  $\$  (E. C. Z.), at light; Blue Lagoon, Papeete, March 1, 1934,  $\$  (E. C. Z.), at light.

Austral Islands: Raivavae, east slope of Mount Muanui, altitude 500-800 ft., Aug. 8, 1934, \$\varphi\$ (E. C. Z.); Rapa, northeast ridge of Mangoa Peak, altitude 900-1200 ft., July 4, 1934, \$\varphi\$ (E. C. Z.), beaten from shrubs; near Area, altitude 10 ft., June 30, 1934, \$\varphi\$ (E. C. Z.); southeast valley, Mount Ororangi, altitude 600-700 ft., July 3, 1934, \$\varphi\$ (E. C. Z.), beaten from ferns; Karapo Rahi Islet, altitude 100-200 ft., July 18, 1934, \$\varphi\$ (E. C. Z.); east ridge of Mount

Perahi, altitude 1200-1500 ft. July 21, 1934, \$\parallel (E. C. Z.), in sweepings; Mount Vairu, altitude 1100 ft., July 12, 1934, \$\parallel (E. C. Z.); Mount Taga, altitude 800 ft., July 12, 1934, \$\parallel (E. C. Z.), swept from grasses and low herbage; northwest slopes of Mount Tautautu, altitude 700-800 ft., July 9, 1934, \$\parallel (C. M. Cooke, Jr.).

#### Ponera trigona Forel variety.

Society Islands: Tahiti, March 20, 1925, 9 (G. P. Wilder).

These two poorly preserved specimens which I am unable to refer to any of the described varieties are more robust, with broader head, than females of Santschi's variety *nautarum* in my collection.

#### Odontomachus haematoda (Linnaeus).

Society Islands: Tahiti, Arihiri, Pare, March 26, 1934, & (E. C. Z.).

#### SUBFAMILY MYRMICINAE

#### Pheidole (Pheidole) megacephala (Fabricius).

Austral Islands: Tubuai, Mount Tavaetu, altitude 800 ft., Aug. 22, 1934, § (E. C. Z.); Murivani, altitude 10 ft., Aug. 16, 1934, § (E. C. Z.), swept from grasses and low herbage; Tapapatauai Islet, altitude 5 ft., Aug. 19, 1934, § (E. C. Z.), swept from grasses and low herbage; southwest side of Taita, altitude 1,000 ft., Aug. 15, 1934, ¼ § § (E. C. Z.).

Mangareva Islands: Mangareva, northwest slope of Mount Duff, altitude 200-300 ft., May 23, 1934, 4 \$ Q (E. C. Z.); pass west of Rikitea, June 1, 1934, 4 \$ (F. R. Fosberg); near convent, May 24, 1934, 4 \$ (E. C. Z.), Agakauitai, altitude 10 ft., June 8, 1934, 4 \$ (E. C. Z.), on dead coconut fronds; Aukena, northwest side, May 25, 1934, \$ (E. C. Z.), swept from grasses and low herbage; Korovao, May 29, 1934, \$ (E. C. Z.), swept from grasses and low herbage; Taravai, northwest side, June 1, 1934, 4 \$ (E. C. Z.), swept from grasses and low herbage; Taravai, June 1, 1934, \$ (E. C. Z.), swept from grasses and low herbage; Akamaru, north side, May 29, 1934, \$ (E. C. Z.), swept from grasses and low herbage.

Pheidole (Pheidole) oceanica Mayr variety boraborensis Wheeler. Society Islands: Borabora, mountain north of Mount Patio, altitude 600-800 ft., Oct. 13, 1934, & (E. C. Z.).

Pheidole (Pheidole) oceanica subspecies nigriscapa Santschi variety tahitiana Santschi.

Society Islands: Raiatea, Oct. 11, 1926, 24 \( \) (J. W. Moore, G. P. Wilder); Faaroa Bay, northwest ridge, altitude 400 ft., Oct. 6, 1934, \( \) (E. C. Z.); Moorea, Jan. 20, 1925, 24 \( \) \( \) (G. P. Wilder); Tehau Point, altitude 10 ft., Sept. 24, 1934, \( \) (E. C. Z.), swept from grasses and low herbage; Huahine, Jan. 26, 1926, 24 \( \) (G. P. Wilder); Tahiti, 1925, 24 \( \) (E. S. C. Handy); Lake Vaihiria, May 5, 1927, \( \) (G. P. Wilder); Fautaua Valley, altitude 300-700 ft., March 3-7, 1934, \( \) (E. C. Z.); one and a half miles east of Papeete, March 1, 1934, 24 \( \) (E. C. Z.), on dead purau (Hibiscus tiliaceus) leaves; Papeari, April 1927, \( \) (G. P. Wilder); Mount Aorai Trail, altitude 5800 ft., Sept. 10, 1934, \( \) (E. C. Z.); Tiupi Bay, Papeari, April 5, 1934, 24 \( \) \( \) (E. C. Z.), on mape (Inocarpus edulis); Arihiri, Pare, March 8, 1934, \( \) (E. C. Z.); Mount Vaitaare, near Afaahiti, March 20, 1934, 24 \( \) \( \) (E. C. Z.); Mount Vaitaare, near Afaahiti, March 20, 1934, 24 \( \) \( \) (E. C. Z.).

Austral Islands: Rurutu, Upopepe Valley, altitude 100 ft., Aug. 27, 1934, 4 \$\forall (E. C. Z.); Rimatara, Oromana Hills, altitude 250 ft., Sept. 4, 1934, 4 \$\forall (E. C. Z.), swept from grasses and low herbage; Anapote, altitude 25 ft., Sept. 4, 1934, \$\forall (E. C. Z.), swept from grasses and low herbage; Raivavae, Mount Anatoni, altitude 5 ft., Aug. 12, 1934, \$\forall (E. C. Z.), swept from grasses and low herbage; near Unurau, altitude 100 ft., Aug. 3, 1934, \$\forall (E. C. Z.); Motu Tehau, altitude 5 ft., July 11, 1934, \$\forall (E. C. Z.), swept from grasses and low herbage; Raiurua, altitude 5 ft., Aug. 5, 1934, \$\forall (E. C. Z.), swept from grasses and low herbage; Pic Rouge, south slope, altitude 200-400 ft., Aug. 5, 1934, 4 \$\forall (E. C. Z.).

Tuamotu Islands: Makatea, Oct. 1932, & (G. P. Wilder); Timoe, northern islet, June 25, 1934, & (E. C. Z.).

Pitcairn Island, back of village, June 15, 1934, 24 (E. C. Z.); north side, June 13, 1934, 24 § (E. C. Z.); south side, altitude 500-900 ft., June 14, 1934, § (E. C. Z.), swept from grasses and low herbage, and beaten from dead banana leaves and *Metrosideros*.

Pheidole (Pheidole) umbonata Mayr subspecies zimmermani, new subspecies.

Soldier: head distinctly larger and broader than in the typical *umbonata*, with deeper occipital excision and more flattened eyes, the posterior corners with larger, more conspicuous, shallow punctures. Epinotal teeth stouter and more erect. Color decidedly darker, the head and thorax being reddish testaceous, the

postpetiole and gaster dark brown or black, the legs and antennae brownish-yellow.

Worker: much darker than the worker of typical umbonata, being dark brown, with brownish-yellow mandibles, antennae, and legs. Epinotal teeth somewhat longer and more slender.

Female: head more sharply rugose than in the typical form, and like the thorax and pedicel of a deeper red color, with the mesonotum and scutellum more extensively dark brown or black. Ocellar triangle black. Gaster dark brown. Wings, too, distinctly darker.

Male: head black, thorax piceous, gaster brown; appendages scarcely paler than the thorax. Wings as in the female.

Society Islands: Tahiti, near Vaitaare, Papeari (type locality), March 23, 1934, 4 \$ \$ (E. C. Z.); Tiupi Bay, Papeari, March 19-21, 1934, 4 \$ (E. C. Z.); Moorea, Pehau Point, altitude 10 ft., Sept. 24, 1934, \$ (E. C. Z.), swept from grasses and low herbage.

Austral Islands: Rurutu, Mount Manureva, altitude 1200 ft., Aug. 28, 1934, & (E. C. Z.), swept from grasses and low herbage; Raivavae, Mount Hiro, altitude 1200 ft., Aug. 10, 1934 (E. C. Z.), beaten from *Pteris*.

Types in the collection of Bernice P. Bishop Museum; paratypes in the Museum of Comparative Zoology.

The subspecies *zimmermani* is closely related to the subspecies fusciventris Emery from New Guinea, but the soldier of this form has the rugae of the head extending to its posterior border and the worker is yellow, like the worker of the typical Ph. umbonata.

# Pheidole (Pheidolacanthinus) sexspinosa Mayr subspecies adamsoni Wheeler.

Society Islands: Huahine, altitude 700-800 ft., northwest of Mount Turi, Sept. 30, 1934, \(\pi\) (E. C. Z.).

A single specimen.

#### Cardiocondyla nuda Mayr variety minutior Forel.

Flint Island, altitude 10 ft., Oct. 19, 1934, \(\beta\) (E. C. Z.).

Two specimens, "swept from grasses and low herbage", agreeing with the Hawaiian form.

#### Cardiocondyla nuda subspecies nereis Wheeler.

Society Islands: Borabora, west slope of mountain west of Mount Pahio, altitude 1700 ft., Oct. 13, 1934, & (E. C. Z.); Tahiti, Tiupi Bay, Papeari, May 3, 1934, & (E. C. Z.); valley east of Pirae, Pare, June 23, 1934, & (E. C. Z.); Moorea, Tehau Point, altitude 10 ft., Sept. 24, 1934, & (E. C. Z.).

Austral Islands: Rimatara, Oromana Hills, altitude 2500 ft., Sept. 4, 1934, \$\forall (E. C. Z.); Anapoto, altitude 10 ft., Sept. 4, 1934, \$\forall (E. C. Z.); Maria Island, northeast islet, altitude 5 ft., Sept. 6, 1934, \$\forall (E. C. Z.); Raivavae, Riurua, altitude 5 ft., Aug. 5, 1934, \$\forall (E. C. Z.); near Ahuoivi Point, altitude 5 ft., Aug. 9, 1934, \$\forall (E. C. Z.); near Anatoni, altitude 5 ft., Aug. 12, 1934, \$\forall (E. C. Z.); Tubuai, altitude 10 ft., Aug. 16, 1934, \$\forall (E. C. Z.); Rurutu, Mount Manureva, altitude 1,000 ft., Aug. 29, 1934, \$\forall (E. C. Z.); Upopepe Valley, altitude 100 ft., Aug. 27, 1934, \$\forall (E. C. Z.). Marotiri, southeast islet, altitude 100-200 ft., July 22, 1934, \$\forall (E. C. Z.).

Tuamotu Islands: Anaa, Tukuhora, May 13, 1934, \$\times\$ (E. C. Z.). Mangareva Islands: Aukena, Korovao, May 29, 1934, \$\times\$ (E. C. Z.); Agakauitai, altitude 18 ft., June 8, 1934, \$\times\$ (E. C. Z.); Mangareva, near convent, May 25, 1934, \$\times\$ (E. C. Z.); near chapel, Point Teonekura, altitude 1300 ft., May 25, 1934, \$\times\$ (E. C. Z.); near Rururu, altitude 300 ft., May 25, 1934, \$\times\$ (E. C. Z.); northeast slope of Mount Duff, altitude 100-500 ft., May 23, 1934, \$\times\$ (E. C. Z.); near Ohituiti, May 25, 1934, \$\times\$ (E. C. Z.); Taravai, June 1, 1934, \$\times\$ (E. C. Z.); Akamaru, north side, May 29, 1934, \$\times\$ (E. C. Z.).

Pitcairn Island, north side, May 13, 1934, ♥ (E. C. Z.).

Henderson Island, north and northwest side, altitude 100 ft., June 17, 1934, & (E. C. Z.).

Oeno Island, June 23, 1934, \(\Xi\) (E. C. Z.).

This material, comprising 241 specimens, all or almost all swept from grasses and low herbage by Mr. Zimmerman, is very uniform and belongs to the subspecies *nereis* which is distinguished from the preceding variety by the distinctly shining and less densely punctate sculpture and more vivid coloration of the worker and female. The specimens agree closely with the types from Norfolk Island.

#### Solenopsis geminata (Fabricius) subspecies rufa (Jerdon).

Society Islands: Tahiti, Arihiri, Pare, March 16, 1934, \$\\(\xi\) (E. C. Z.), on dead spider; Tiupi Bay, Papeari, April 4, 1934, April 6, 1934, \$\\(\xi\) (E. C. Z.), on mape and nesting in rocks; one and a half miles northeast of Papeete, March 1, 1934, \$\\(\xi\) (E. C. Z.); Arue, altitude 50 ft., March 6, 1934, \$\(\xi\) (E. C. Z.), swept from a legume; Fautaua Valley, altitude 300-700 ft., March 3, 1934, \$\\(\xi\) (E. C. Z.); Moorea, Jan. 20, 1925, \$\\(\xi\) (G. P. Wilder); Tehau Point, altitude 10 ft., Sept. 24, 1934, \$\\(\xi\) (E. C. Z.), swept from grasses and low herbage; Raiatea, Paaoi Valley, altitude 800 ft., Oct. 8, 1934, \$\\(\xi\) (E. C. Z.).

Austral Islands: Rapa, Mount Tanga, altitude 700-800 ft., July 23, 1934, § (E. C. Z.), on Sida.

Flint Island, altitude 10 ft., Oct. 16, 1934, & (E. C. Z.), swept from grasses and low herbage.

#### Monomorium (Monomorium) floricola (Jerdon).

Society Islands: Tahiti, valley east of Pirae, Pare, March 23, 1934, § (E. C. Z.); Tiupi Bay, Papeari, March 19, 1934, § (E. C. Z.); Tahiti, 1927, and Papeete, Aug. 14, 1934, § § (G. P. Wilder); Maara, March 15, 1925, § (G. P. Wilder); Arihiri, Pare, March 27, 1934, § (E. C. Z.), at light; Borabora, west slope of mountain west of Mount Pahio, altitude 600-800 ft., § (E. C. Z.); Moorea, altitude 10 ft., Sept. 24, 1934, § (E. C. Z.), swept from grasses and low herbage.

Austral Islands: Raivavae, near Unurau, Aug. 3, 1934, & (E. C. Z.), under bark of *Hibiscus tiliaceus* and swept from grasses and low herbage; Rimatara, Oromana Hills, altitude 250 ft., Oct. 4, 1934, & (E. C. Z.), swept from grasses and low herbage; Maria Island, northeast islet, altitude 5 ft., Sept. 6, 1934, & (E. C. Z.).

Tuamotu Islands: Hao, Boring Bay, May 18, 1934, & (E. C. Z.); South Marutea, May 28, 1934, & (E. C. Z.), at base of coconut frond; Timoe, June 25, 1934, & (E. C. Z.).

Mangareva Islands: Agakauitai, altitude 10 ft., June 8, 1934, & (E. C. Z.), on dead coconut fronds; Taravai, northwest side, June 1, 1934, & (E. C. Z.), on dead coconut fronds.

Pitcairn Island, north side, June 13, 1934, ♥ (E. C. Z.), swept from grasses and low herbage.

Henderson Island, north side, altitude 100 ft., June 18, 1934,  $\mathbb{?}$  (E. C. Z.).

Flint Island, Oct. 16, 1934, & (E. C. Z.).

# Monomorium (Monomorium) minutum Mayr variety samoanum Santschi.

Society Islands: Moorea, Tehau Point, altitude 10 ft., Sept. 24, 1934, \$\pi\$ (E. C. Z.), swept from grasses and low herbage; Tahiti, valley east of Pirae, Pare, March 23, 1934, \$\pi\$ (E. C. Z.).

The female (undescribed) resembles the female of M. floricola in being apterous and ergatomorphic. Unfortunately the abdomen of the single specimen is missing. The color of the head and thorax resembles that of the corresponding parts of the worker, but the mesonotum and scutellum are pale yellow.

### Monomorium (Parholcomyrmex) destructor (Jerdon).

Society Islands: Tahiti, March 1925, & (G. P. Wilder). Not previously recorded from the Society Islands.

#### Monomorium (Notomyrmex) rapaënse, new species.

Worker: length 3-4.3 mm.

Head subelliptical, one and one-fifth times as long as broad without the mandibles; cheeks nearly straight, subparallel, sides narrowing behind the eyes, the posterior corners broadly rounded, the posterior border feebly convex. Mandibles rather small, with oblique 5-toothed apical borders, the terminal tooth long and acute, the others small and blunt. Clypeus convex in the middle, its pair of longitudinal carinae rather blunt and not terminating in teeth at the border, which is narrowly produced in the middle and feebly emarginate. Eyes small, convex, just in front of the median transverse diameter of the head, only half as long as their distance from its anterior corners. Antennal scapes extending a distance somewhat more than their greatest width beyond the posterior border of the head; funiculi with indistinctly 5-jointed club; first funicular joint nearly as long as joints 2-4 together, joints 2-6 distinctly broader than long, 7 and 8 as long as broad, the terminal joint of the club longer than the two preceding joints combined. Thorax rather long, widest through the pronotum which is feebly rounded above and on the sides, in profile continuous with the gradually sloping mesonotum, which is longer than broad and narrowed posteriorly to the long, feeble mesoëpinotal impression. Promesonotal and mesoëpinotal sutures neither strong nor impressed. Base of epinotum distinctly convex in profile, about twice as long as the nearly perpendicular declivity into which it passes without a distinct angle. Petiole large, nearly as high as long, higher than the epinotum, pedunculate anteriorly, with small, blunt anteroventral tooth; anterior slope of node long and distinctly concave in profile, the summit evenly convex, the posterior surface short and perpendicular or even slightly concave below; seen from above the peduncle is as long as the node, which is transversely elliptical and nearly twice as broad as long. Postpetiolar node much lower than the petiolar node, but very convex, broadly elliptical, about one-fourth broader than the petiole. Gaster elliptical, its first segment slightly truncated anteriorly. Femora somewhat incrassated.

Very smooth and shining, sparsely and finely punctate; antennal foveae with a few faint, concentric striae; meso- and metapleurae longitudinally punctate-rugulose.

Hairs yellow, erect, moderately long and abundant on the head and thorax, shorter and more oblique on the gaster; on the appendages even shorter, appressed or subappressed, especially on the legs. Pubescence absent.

Yellowish red; head darker red or brownish, especially behind; antennae and legs scarcely paler than the thorax; first gastric segment posteriorly with a poorly defined blackish band.

Described from 27 specimens taken by Mr. E. C. Zimmerman in the following localities on Rapa: northeast ridge of Mangaoa Peak (type locality), altitude 1,000-1200 ft., July 6 and 25, 1934, beaten from shrubs and *Metrosideros*; east ridge of Mount Perahu, altitude 1200-1500 ft., July 21, 1934, beaten from *Coprosma*, *Fitchia* and *Lautea*; northeast slope of Mount Tevaitahu, altitude 700-800 ft.,

July 8, 1934; south slope of Mount Tepiahu, altitude 400-600 ft., July 16, 1934, beaten from *Fitchia*.

Types in Bernice P. Bishop Museum; paratypes in Museum of Comparative Zoology.

### Oligomyrmex tahitiensis, new species.

Female: length 5 mm. Head suboblong, slightly narrower in front than behind, with straight, subparallel cheeks, subrectangular posterior corners and feebly and sinuately concave posterior border. Eyes moderately large and convex, slightly shorter than their distance from the anterior corners. Mandibles stout, convex, 6-toothed. Clypeus bluntly bicarinate, with medially emarginate anterior border. Antennae 9-jointed, scapes reaching half-way to the posterior corners of the head; funicular joints all longer than broad, terminal joint of the 2-jointed club enlarged, more than twice as long as the preceding joint. Thorax from above elongate-elliptical, decidedly narrower than the head; mesonotum nearly two-thirds longer than broad, as long as the remainder of the thorax in profile, perpendicular anteriorly, straight and horizontal above; epinotum abruptly sloping in the middle, without distinct base and declivity, on each side broadly and bluntly dentate. Petiole longer than high, with distinct but short peduncle, the node concave anteriorly and posteriorly, its apex somewhat truncated; seen from above the petiole is nearly twice as long as broad, the node longer than broad. Postpetiole slightly broader than the petiole, broader in front than behind, with an anteromedian convexity bordered on each side by a short, crenate ridge. Gaster elongate-elliptical. Wings rather narrow, measuring 4.6 mm.

Shining; mandibles sparsely punctate, anterior three-fourths of head regularly longitudinally striate, mesonotum and posterior portion of head very finely and indistinctly punctulate, mesopleurae and sides of pronotum very smooth and shining; epinotum striate-punctate; petiole and postpetiole densely and evenly punctate; gaster, legs and scapes finely shagreened, with small, sparse, piligerous punctures.

Hairs yellowish, of uneven length, rather short but moderately abundant, erect or suberect on the body, more oblique on the appendages.

Head, thorax and pedicel dark brown; mandibles reddish; gaster, legs, funiculi and tips of scapes brownish-yellow; first gastric segment largely dark brown above, second and third segments each with a poorly defined median brown band. Wings distinctly and uniformly infuscated, with brown veins and pterostigma.

Male: length nearly 4 mm. Head through the eyes broader than long, convex dorsally and posteriorly, with short anteriorly converging cheeks and large, convex eyes and ocelli, the sides behind the eyes rounded, without posterior corners, converging to the posterior border which is somewhat impressed. Mandibles, small, tridentate. Clypeus with a prominent conical medial tubercle posteriorly, the anterior border entire and rounded. Frontal area and groove distinct, frontal carinae vestigial. Antennae 13-jointed; scapes slightly more than twice as long as broad, as long as the second funicular joint; first funicular joint one and one-half times as long as broad, basally constricted; joints 3-11 cylindrical, more than twice as long as broad but only half as long as the terminal joint and distinctly shorter than the third joint. Thorax resembling that of the female and, though smaller and proportionally shorter, as broad as the head through the eyes. Epinotum more sloping, with only indistinct traces

of the lateral teeth. Petiole shorter and lower than that of the female, its node in profile with straight, sloping anterior and abrupt posterior surface, its apex rounded. Postpetiole larger and slightly broader than the petiolar node, transversely elliptical. Gaster elongate, parallel-sided, truncated anteriorly. Genitalia exserted, stipites long, claw-shaped, with acute tips. Legs rather slender. Wings nearly 4 mm.

Shining; mandibles with a few coarse punctures. Head finely, longitudinally striate, the striae on the front converging to the ocelli, transverse on the ocellar triangle; thorax smooth and sparsely punctate, anteromedian portion of mesonotum, the epinotum and the regions bordering the pleural sutures finely striate; pedicel evenly and densely punctate.

Pilosity like that of the female but more abundant on the head and shorter and more appressed on the appendages.

Black; antennae, legs and genitalia dark brown; terminal tarsal joints reddish; wings infuscated as in the female.

Society Islands: Tahiti, Taohiri, on Mount Aorai Trail, altitude 3500 ft., Sept. 12, 1934, collected by E. C. Zimmerman, one female and two males.

Types in Bernice P. Bishop Museum.

I have hesitated to describe this form belonging to a rather large and difficult group, but even at the risk of making a synonym, which is improbable owing to the long distance of Tahiti from the hitherto known range of the genus, the introduction of a new specific name seemed preferable to the mere record "Oligomyrmex sp."

#### Tetramorium caespitum (Linnaeus).

Society Islands: Tahiti, Lake Vaihiria, May 5, 1927, & (G. P. Wilder).

A single specimen of this common European and North American ant, probably introduced by commerce.

#### Tetramorium guineënse (Fabricius).

Society Islands: Tahiti, June 3, 1927,  $\mathfrak P}$  (L. H. MacDaniels); Papeete, Oct. 1926,  $\mathfrak P}$  (G. P. Wilder); Tiupi Bay, Papeari, March 19, 1934, and May 3, 1934,  $\mathfrak P}$  (E. C. Z.); Apaahiti, near Vaitaare, March 20, 1934,  $\mathfrak P}$  (E. C. Z.); Lake Vaihiri, Oct. 5, 1927,  $\mathfrak P}$  (G. P. Wilder); near Papeete, March 23, 1934,  $\mathfrak P}$  (E. C. Z.); valley east of Pirae, Pare, March 23, 1934,  $\mathfrak P}$  (E. C. Z.); Borabora, west slope of Mount Pahio, altitude 1700 ft., Oct. 13, 1934,  $\mathfrak P}$  (E. C. Z.); Raiatea, northwest side of Faaroa Bay, altitude 25 ft., Oct. 6, 1934,  $\mathfrak P}$  (E. C. Z.), swept from grasses and low herbage.

Austral Islands: Maria, northeast islet, altitude 5 ft., Sept. 6, 1934, & (E. C. Z.); Rimatara, Oromana Hills, altitude 250 ft., Sept. 4, 1934, & (E. C. Z.), swept from grasses and low herbage; Rapa,

near Area, altitude 10 ft., June 30, 1934, \$\times\$ (E. C. Z.); Raivavae, near Unurau, altitude 100 ft., Aug. 3, 1934, \$\times\$ (E. C. Z.).

Tuamotu Islands: Tepoto, May 16, 1934, \(\xi\) (E. C. Z.), swept from low herbage; Timoe, north islet, June 25, 1934, \(\xi\) (E. C. Z.).

Mangareva Islands: Taravai, northwest side, June 1, 1936, ♥ (E. C. Z.), on dead coconut fronds; Mangareva, Gatavake, May 26, 1934, ♥ (E. C. Z.); south side of Mount Mokoto, altitude 1,000 ft., June 6, 1934, ♀ (E. C. Z.).

Pitcairn Island, south side, altitude 700-900 ft., June 14, 1934, & (E. C. Z.), in low sweepings; north side, June 13, 1934, & (E. C. Z.), in mango stump.

Henderson Island, north side, altitude 100 ft., June 20, 1934, ♥ (F. R. Fosberg), under dead bark.

Oeno Island, June 23, 1934,  $\mbox{ } \mbox{ }$ 

#### Tetramorium pacificum Mayr.

Society Islands: Meetia, Fatia-po, altitude 500-1,000 ft., May 12, 1934, § (E. C. Z.); Moorea, Faatoai Valley, altitude 200 ft., Sept. 23, 1934, § (E. C. Z.); Huahine, southeast end of Haapu Bay, altitude 50-100 ft., Oct. 3, 1934, § (E. C. Z.); Tahiti, Afaakiti, near Vaiteare, March 20, 1934, § (E. C. Z.); Lake Vaihivia, May 5, 1927, § (G. P. Wilder); Raiatea, altitude 1200-1600 ft., Oct. 5, 1934, § (E. C. Z.), beaten from *Metrosideros*; northwest ridge, Faaroa Bay, altitude 400 ft., Oct. 6, 1934, § (E. C. Z.).

Austral Islands: Raivavae, near Unurau, altitude 100 ft., Aug. 3, 1934, \$\forall (E. C. Z.); near Anatoni, altitude 5 ft., Aug. 12, 1934, \$\forall (E. C. Z.), swept from grasses and low herbage; south slope of Mount Muanui, altitude 300-600 ft., Aug. 6, 1934, \$\forall (E. C. Z.); Tubuai, Rautaro Islet, altitude 5 ft., Aug. 19, 1934, \$\forall (E. C. Z.); Rurutu, southwest slope of Mount Manureva, altitude 1,000 ft., Aug. 28, 1934, \$\forall (E. C. Z.), swept from ferns and low herbage; south slope of Mount Teape, altitude 700 ft., Sept. 2, 1934, \$\forall (E. C. Z.); one mile north of Avera, altitude 800 ft., Aug. 24, 1934, \$\forall (E. C. Z.); Rapa, Karapo Islet, altitude 100-300 ft., July 18, 1934, \$\forall (E. C. Z.); southeast valley of Mount Ororangi, altitude 600-700 ft., Aug. 3, 1934, \$\forall (E. C. Z.), swept from ferns.

Tuamotu Islands: Makatea, 1932, & (G. P. Wilder).

Mangareva Islands: Mangareva, south side of Mount Mokoto, altitude 1,000 ft., June 6, 1934, ♥ (E. C. Z.), on Asplenium nidus.

### Tetramorium simillimum (F. Smith).

Austral Islands: Raivavae, west slope of Mount Muanui, altitude 500 ft., Aug. 8, 1934, & (E. C. Z.), swept from *Angiopteris* fronds.

## Tetramorium tonganum Mayr.

Austral Islands: Rimatara, Maraitere, altitude 25 ft., Sept. 5, 1934,  $\,\,^{\,\downarrow}$  (E. C. Z.), swept from grasses and low herbage; Oromana Hills, altitude 250 ft., Sept. 4, 1934,  $\,^{\,\downarrow}$  (E. C. Z.), swept from grasses and low herbage; Rurutu, south slope of Mount Teape, altitude 700 ft., Sept. 2, 1934,  $\,^{\,\downarrow}$  (E. C. Z.).

Christmas Island, Grieg's Grove, altitude 3 ft., & (E. C. Z.).

#### Strumigenys godeffroyi Mayr.

Austral Islands: Raivavae, near Unurau, altitude 100 ft., Aug. 3, 1934, & (E. C. Z.).

A single specimen.

#### SUBFAMILY DOLICHODERINAE

Tapinoma melanocephalum (Fabricius) variety australe Santschi. Society Islands: Moorea, Jan. 20, 1925, & (G. P. Wilder); Tehau Point, altitude 10 ft., Sept. 24, 1934, & (E. C. Z.), swept from grasses and low herbage; Urufara Valley, altitude 300 ft., Sept. 22, 1934, & (E. C. Z.); Tahiti, 1923, & (E. S. C. Handy); valley of Pirae, Pare, March 23, 1934, & (E. C. Z.).

Austral Islands: Maria, northeast islet, altitude 5 ft., Sept. 6, 1934, § (E. C. Z.).

Tuamotu Islands: Timoe, northern islet, June 25, 1934, & (E. C. Z.).

Mangareva Islands: Akamaru, north side, May 27, 1934, 9 (E. C. Z.), on *Hibiscus tiliaceus*.

Henderson Island, north side, June 16, 1934, & (E. C. Z.), on dead pandanus leaves.

Flint Island, altitude 10 ft., Oct. 16, 1934,  $\,\,\,\,\,\,\,\,\,\,\,$  (E. C. Z.), swept from grasses and low herbage.

#### Technomyrmex albipes (F. Smith).

Society Islands: Tahiti, Arihiri, Pare, March 8, 1934, \$\partial \text{(F. C. Z.)}\$, under dead bark; Lake Vaihiria, May 5, 1927, \$\partial \text{(G. P. Wilder)}\$; Fautaua Valley, March 7, 1934, \$\partial \text{? }\text{? }(E. C. Z.)\$; Mount Aorai Trail, altitude 3500 ft., Sept. 12, 1934, \$\partial \text{(E. C. Z.)}\$; northwest ridge of Mount Turi, altitude 1700-2100 ft., Oct. 1, 1934, \$\partial \text{(E. C. Z.)}\$; Raiatea, Jan. 27, 1925, \$\partial \text{(G. P. Wilder)}\$; Moorea, Jan. 20, 1925, \$\partial \text{(G. P. Wilder)}\$.

Austral Islands: Raivavae, east and west slopes of Mount Muanui, altitude 500-800 ft., Aug. 8, 1934, \$\neq\$ (E. C. Z.), beaten from a species of Celastraceae and low herbage; near Unurua, altitude 100 ft., Aug. 15, 1934, \$\neq\$ (E. C. Z.); south slope of Pic Rouge, Aug. 5, 1934, \$\neq\$ (E. C. Z.); Tubuai, Rautaro Islet, altitude 5 ft., Aug. 19, 1934, \$\neq\$ (E. C. Z.); Rimatara, Maraitere, altitude 25 ft., Sept. 5, 1934, \$\neq\$ (E. C. Z.); Rurutu, southwest slope of Mount Manureva, altitude 1,000 ft., Aug. 25, 1934, \$\neq\$ (E. C. Z.).

Tuamotu Islands: Timoe, north islet, June 25, 1934, § (E. C. Z.). Mangareva Islands: Agakauitai, altitude 10 ft., June 8, 1934, § (E. C. Z.); Mangareva, south side of Mount Mokotu, altitude 1,000 ft., June 2-7, 1934, § (E. C. Z.), in dead leaves; Akamaru, north side, May 29, 1934, § (E. C. Z.), swept from grasses and low herbage; Taravai, June 1, 1934, § (E. C. Z.), swept from grasses and low herbage.

Henderson Island, north and northwest side, altitude 100 ft., June 19 and 20, 1934, \$\delta\$ (E. C. Z.), under dead bark.

Pitcairn Island, north side, June 13, 1934, \(\pi\) (E. C. Z.).

#### SUBFAMILY FORMICINAE

#### Anoplolepis longipes (Jerdon).

Society Islands: Tahiti, Arihiri, Pare, March 16, 1934, § (E. C. Z.), nesting in a coconut; Fautaua Valley, altitude 300-700 ft., March 3, 1934, § & (E. C. Z.); Arue, altitude 50 ft., March 6, 1934, § & (E. C. Z.), swept from a legume; Papeete, Sept. 12, 1932, Oct. 1926, § (G. P. Wilder); Blue Lagoon, Papeete, March 1, 1934, & (E. C. Z.), at light; valley of Pirae, Pare, March 23, 1934, § (E. C. Z.); Raiatea, Faaroa Bay, Oct. 6, 1934, & (E. C. Z.), at ship's lights; Moorea, Tehau Point, Sept. 24, 1934, § (E. C. Z.), swept from grasses and low herbage.

Austral Islands: Rimatara, Oromana Hills, altitude 250 ft., Sept. 4, 1934, \(\forall \) (E. C. Z.), swept from grasses and low herbage.

Tuamotu Islands: Anaa, Tukuhora, May 13, 1934, & Q (E. C. Z.); south Marutea, northwest islet, May 22, 1934, & (E. C. Z.); Makatea, 1932, & (G. P. Wilder).

Mangareva Islands: Agakautai, June 8, 1934, & (E. C. Z.), in dead *Pandanus* leaves; Mangareva, near convent, altitude 300 ft., May 24, 1934, & (E. C. Z.), swept from grasses and low herbage.

#### Plagiolepis mactavishi Wheeler.

Society Islands: Tahiti, 1923, § (E. S. C. Handy); valley of Pirae, Pare, March 23, 1934, § (E. C. Z.); Raiatea, Jan. 27, 1925, § (G. P. Wilder); Uluroa, Jan. 29, 1925, § (G. P. Wilder); Huahine, Jan. 26, 1925, § (G. P. Wilder).

Austral Islands: Rapa, one fourth mile east of Area, July 1, 1934, \$\times\$ (E. C. Z.); northeast ridge of Mangaoa Peak, July 29, 1934, \$\times\$ (E. C. Z.); Raivavae, Pic Rouge, south slope, altitude 200-400 ft., July 5, 1934, \$\times\$ (E. C. Z.).

Mangareva Islands: Akamaru, north side, May 29, 1934, ♥ (E. C. Z.); Mangareva, northeast slope of Mount Duff, May 23, 1934, ♥ (E. C. Z.), under coconuts and logs.

#### Paratrechina longicornis (Latreille).

Society Islands: Tahiti, 1923, Q (E. S. C. Handy); Oeno, July 23, 1934, Q (E. S. C.,), swept from grasses and low herbage.

#### Nylanderia bourbonica Forel variety bengalensis Forel.

Society Islands: Tahiti, Blue Lagoon, near Papeete, Feb. 26, 1934, 9 (E. C. Z.), at light.

Austral Islands: Tubuai, Murivani, altitude 10 ft., Aug. 16, 1934, \$\times\$ (E. C. Z.), swept from grasses and low herbage.

Tuamotu Islands: Hao, Tekotiko, May 19, 1934, & P. (E. C. Z.); Tepoto, near center, May 16, 1934, & P. (E. C. Z.), swept from grasses and low herbage.

Mangareva Islands: Taravai, June 1, 1934, § (E. C. Z.), swept from grasses and low herbage; Mangareva, near convent, altitude 300 ft., May 24, 1934, § & (E. C. Z.), swept from grasses and low herbage; Agakauitai Island, altitude 10 ft., June 8, 1934, § (E. C. Z.), swept from grasses and low herbage.

Pitcairn Island, south side, altitude 700-900 ft., June 14, 1934, § (E. C. Z.), swept from grasses and low herbage.

Flint Island, altitude 10 ft., Oct. 16, 1934, \(\xi\) (E. C. Z.), swept from grasses and low herbage.

#### Nylanderia vaga Forel variety crassipilis Santschi.

Society Islands: Meetia, Fatia-po, altitude 500-1,000 ft., May 12, 1934, & (E. C. Z.); Moorea, Jan. 20, 1925, & (G. P. Wilder); Tehau Point, altitude 10 ft., Sept. 24, 1934, & (E. C. Z.), swept from grasses and low herbage; Tahiti, Tiupi Bay, Papeari, April 20, 1934, and May 5, 1934, & & (E. C. Z.), at light; Arihiri, Pare, March 26, 1934, & (E. C. Z.); Rimatu, March 8, 1925, & & (G. P. Wilder), on *Tournefortia;* Papeete, Aug. 15, 1920, & (G. P. Wilder); Maara, Papiera, March 16, 1925, & & (G. P. Wilder); valley east of Pirae, Pare, March 23, 1934, & (E. C. Z.); Huahine, northwest ridge of Mount Turi, altitude 1700-2100 ft., Oct. 1, 1934, & (E. C. Z.).

Austral Islands: Rimatara, Oromana Hills, altitude 250 ft., Sept. 5, 1934, \$\times\$ (E. C. Z.), swept from grasses and low herbage; Tubuai, altitude 10 ft., Aug. 16, 1934, \$\times\$ (E. C. Z.), swept from grasses and low herbage; Rapa, near Araa, altitude 25 ft., Aug. 1, 1934, \$\times\$ (E. C. Z.), swept from grasses and low herbage; near Point Marioa, altitude 10 ft., July 24, 1934, \$\times\$ (E. C. Z.), on Hibiscus tiliaceus; Morongota Plateau, altitude 700-800 ft., July 11, 1934, \$\times\$ (E. C. Z.); northeast ridge of Morongeto Peak, altitude 1000-1200 ft., July 6, 1934, \$\times\$ (E. C. Z.); near Ahurei, 50-200 ft., July 16, 1934, \$\times\$ (E. C. Z.); swept from grasses and low herbage; southeast valley of Mount Ororangi, altitude 600-800 ft., July 3, 1934, \$\times\$ (E. C. Z.); Maria Island, northeast islet, altitude 5 ft., Sept. 6, 1934, \$\times\$ (E. C. Z.); Raivavae, altitude 5 ft., Aug. 5, 1934, \$\times\$ (E. C. Z.), swept from grasses and low herbage.

Tuamotu Islands: South Marutea, northwest islet, May 22, 1934, § (E. C. Z.); Timoe, northern islet, June 25, 1934, § (E. C. Z.).

Mangareva Islands: Taravai, June 1, 1934, § (E. C. Z.), swept from grasses and low herbage; Aukena, Korovao, May 29, 1934, § (E. C. Z., swept from grass and low herbage; Mangareva, altitude 1,000 ft., June 27, 1934, § (E. C. Z.), on dead banana leaves.

Henderson Island, northwest side, altitude 100 ft., June 17, 1934, (E. C. Z.).

Flint Island, altitude 10 ft., Oct. 16, 1934, & (E. C. Z.).

The specimens from these various localities vary much in color and many of them seem to be transitional between the typical *vaga* and Santschi's variety.