

ADDITIONS TO THE ANT-FAUNA OF KRAKATAU AND VERLATEN ISLAND.

By

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Since my publication in 1924 on the ants of Krakatau and other islands in the Sunda Strait, ¹⁾ Dr. K. W. DAMMERMAN has continued his investigation of their insect-fauna and has made an important contribution to the list of Formicidae. Twenty-one, or more than half of the forms which he has kindly sent me for identification, have not been taken heretofore either on Krakatau or Verlaten, and may be regarded as recent immigrants from Eastern Sumatra via Sebesi Island. The names of these additions are preceded by asterisks in the following pages. Twelve years ago 37 forms were known from Krakatau and 11 from Verlaten. Of the latter 9 were common to both islands. Hence in 1924 the total number of forms known to have established themselves on the two islands during the 41 years that had elapsed since their sterilization by the volcanic catastrophe of 1883, was 39. With the accessions recorded in this paper the number has risen to 60. It would seem, therefore, that the immigration of ants into Krakatau and Verlaten has been proceeding at somewhat more than an average rate of one species a year.

Ponerinae.

Odontoponera transversa F. SMITH.

♂ Krakatau, Nov. 1932 and April 1933.

Euponera (Brachyponera) luteipes MAYR.

♂ ♀ Krakatau, Jan. and April 1933; Verlaten, Jan. and Dec. 1933.

Ponera confinis ROGER var. *javana* FOREL.

♂ ♀ Krakatau, April 1933; ♀ Verlaten, Aug. 1930, Jan. 1933.

**Trapeziopelta breviloba* WHEELER.

Two winged females from Krakatau, April 1933, agree closely with the type from Borneo in my collection. The unknown worker must be structurally very similar to *T. bidens* EMERY from Sumatra, but this species is described as piceous, with ferruginous mandibles, funiculi, anus and leg-articulations, whereas *breviloba* is deep red.

**Anochetus punctiventris* MAYR.

♂ Krakatau, Nov. 1932.

¹⁾ Treubia 5, 1924, pp. 239 - 258.

**Anochetus taylori* FOREL.

♂ Verlaten, April and Dec. 1933. Previously recorded from Prinsen Island in the Sunda Strait.

Odontomachus haematoda L.

♂ Krakatau, April 1934; ♀ Verlaten, Jan. and Dec. 1933.

Pseudomyrmicinae.

Tetraoponera (Sima) rufonigra JERDON.

♂ Krakatau, Dec. 1933, April 1934.

Myrmicinae.

Pheidole megacephala FABR.

♂ ♀ Verlaten, April and Dec. 1933.

**Pheidole hortensis* FOREL.

♂ Krakatau, April 1933.

**Pheidole nodgii verlatenensis*, subsp. nov.

Soldier. Length 2.3 - 2.4 mm.

Distinctly smaller than the typical *nodgii* FOREL and its subspecies *tjibodana* and *maxwellensis*. The head is more deeply impressed posteriorly than in *tjibodana* and more shining. Its sculpture is like that of the typical *nodgii*, the posterior corners being coarsely reticulate-rugose with finely reticulated inter-rugal spaces, the humeri are less acute, the mesonotal torus much less pronounced, the epinotal spines decidedly shorter and the postpetiole proportionally longer, with less acute lateral angles. The color is black, like that of *tjibodana*, but the front, petiole, postpetiole and basal third of the first gastric segment are ferruginous.

Described from three specimens taken during January 1933 on Verlaten Island. These have been compared with numerous Javan topotypes of the typical *nodgii* and *tjibodana*, also collected by Dr. DAMMERMAN. FOREL described the latter as a variety but it seems to me to deserve subspecific rank. Judging from his description, *maxwellensis* from Malacca differs so much from the other forms of *nodgii* that it might be regarded as an independent species.

Pheidole miseranda WHEELER.

♂ ♀ Verlaten, April and Dec. 1933.

Worker (undescribed). Length 1.3 - 1.5 mm.

Head without the mandibles as broad as long, slightly narrowed anteriorly, with broadly rounded posterior corners and medially sinuate posterior border. Eyes convex, just in front of the middle of the sides. Mandibles with a single long apical tooth and several basal denticles. Clypeus convex, its anterior border straight and entire in the middle. Frontal area large, semicircular, with median carinula; frontal carinae straight, subparallel, as far apart as their distance from the lateral borders of the head. Antennal scapes thickened apically, reaching very slightly beyond the posterior border of the head. Pro- and mesonotum

forming together an evenly convex, hemispherical mass; epinotum much lower, slightly longer than broad, with subequal base and declivity, the spines sub-erect, half as long as the base. Postpetiole as broad in front as behind, its node blunt and rounded in profile, its summit from behind slightly convex. Postpetiole one and one-half times as broad as the petiole, broader than long, with feebly angulate sides. Gaster broadly elliptical, with truncated anterior border.

Mandibles shining, indistinctly striate; head, thorax and petiolar node subopaque, densely and evenly punctate ("thimble-punctured"); postpetiole, gaster and legs smooth and shining.

Hairs white, very sparse and rather short on the body, shorter, oblique and more numerous on the tibiae.

Head and thorax brownish ferruginous; abdomen, mandibles, antennae and legs paler and more yellowish; middle portions of femora and gaster posteriorly infuscated.

Described from ten specimens. The soldier type is from Krakatau.

Crematogaster (Acrocoelia) ferrarii EMERY.

♂ Krakatau, Oct. 1933; Verlaten, April 1933.

**Crematogaster (Acrocoelia) dohrni rogenhoferi* MAYR.

♂ Krakatau, April and Oct. 1933.

Crematogaster (Physocrema) deformis F. SMITH.

♂ Verlaten, Aug. 1930.

**Pristomyrmex brevispinosus* EMERY.

♂ Krakatau, April 1933.

**Triglyphothrix lanuginosa* MAYR.

♂ Krakatau, April 1933. Previously recorded from Prinsen Island.

**Tetramorium guineense* FABR.

♂ Krakatau, Jan. 1933. Previously recorded from Sebesi Island.

**Tetramorium tonganum* MAYR.

♂ Krakatau, April 1933.

**Strumigenys godeffroyi* MAYR.

♂ Krakatau, April 1933.

Dolichoderinae.

**Iridomyrmex cordatus protensus* FOREL var. *butteli* FOREL.

♂ Krakatau, April 1934; ♀ Verlaten, Jan. 1933.

**Iridomyrmex cordatus fuscus* FOREL var. *jactans* FOREL.

♂ Krakatau, April 1933.

**Technomyrmex albipes* F. SMITH.

♂ Krakatau, Nov. 1932 and April 1933.

**Tapinoma sundaicum* EMERY.

♂ Verlaten, April and Dec. 1933.

**Tapinoma (Micromyrma) melanocephalum* FABR.

♂ Verlaten, Jan. 1933.

Formicinae.

Anoplolepis longipes JERDON.

♂♀♂ Krakatau, Nov. 1932; ♀ Verlaten, Nov. 1932 and 1933, Jan. 1933.

Oecophylla smaragdina FABR.

♀ Verlaten, Jan. 1933.

**Camponotus (Tanaemyrmex) festinus eximius* EMERY.

♀ Krakatau (DOCTERS VAN LEEUWEN), March 1, 1931; ♀ (DAMMERMAN), April 1933.

Camponotus (Tanaemyrmex) irritans F. SMITH.

♀ Krakatau, Jan. 1933, April 1934.

**Camponotus (Tanaemyrmex) irritans* var. *inferior* FOREL.

♀ Krakatau, April 1934.

Camponotus (Myrmamblys) bedoti EMERY.

♀ Krakatau, April 1934; ♀ Verlaten, Aug. 1930.

Camponotus (Colobopsis) vitreus angustatus MAYR.

♀♀ Krakatau, April 1933; Lang Island (DOCTERS VAN LEEUWEN), June 23 - 25, 1932.

Polyrhachis (Myrmhopla) abdominalis F. SMITH.

♀ Krakatau, Nov. 1932, April 1933.

Polyrhachis (Myrmhopla) dives F. SMITH.

♀ Krakatau, Oct. 1933.

Polyrhachis (Myrma) mayri ROGER.

♀ Krakatau, Nov. 1932, Oct. 1933, April 1934.

Polyrhachis (Myrma) proxima ROGER.

♀ Krakatau, Dec. 1933, April 1934.

**Pseudolasius familiaris* F. SMITH.

♀ Krakatau, April 1934.

**Pseudolasius minutus* EMERY.

♀♂ Krakatau, April 1933.

**Nylanderia bourbonica bengalensis* FOREL.

♀ Verlaten, Jan., April and Dec. 1933.

Nylanderia taylori FOREL.

♀♀ Krakatau, April 1933; DOCTERS VAN LEEUWEN, June 13, 1929; ♀ Verlaten, Dec. 1933.