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ACROPYGA (*RHIZOMYRMA*) *ROBAE* SP. NOV. (HYM. *FORMICIDAE*), A NEW S. AMERICAN ANT, WITH REMARKS ON THE GENUS, ETC.

By Horace Donisthorpe, F.Z.S., F.R.E.S., Etc.,
Department of Entomology, British Museum (Nat. Hist.).

Acropyga (Rhizomyrma) robae sp. n.

☿. Pale yellow, apex of mandibles and teeth reddish-brown, eyes brown, whole body clothed with longer and shorter, erect or suberect, pale yellow hairs, extremely finely and closely punctured.

Head subrectangular, about as long as broad, sides feebly rounded, posterior border slightly emarginate; *eyes* very small, consisting of about three facets, situated on the sides of the head about a quarter of the length of the head from anterior border; *mandibles* narrow, curved, armed with three pointed teeth, the apical one being the longest; *clypeus* convex, rounded in front; *frontal area* distinct, moderate, triangular; *frontal furrow* not present; *frontal carinae* moderate, bisinuate; *antennae* 8-jointed; *scape* curved, not quite reaching the posterior corners of the head when bent back; *funiculus* increasing in breadth to apex, first two joints elongate, third and fourth transverse, fifth and sixth as long as broad, last joint pointed, as long as the three preceding taken together. *Thorax* robust, not quite as long as the head and mandible taken together; *pronotum* transverse, rounded at sides; *mesonotum* convex, higher than pronotum, *suture* between distinct; *meso-epinotal suture* somewhat deep, well defined; *epinotum* convex round, sloping gradually to the *declivity*, which is longer than the dorsal region. *Petiole* short, furnished with a *node* which is pointed above, the anterior surface flat, the posterior surface slightly concave; *gaster* rather long and bulky, pointed at apex. *Legs* moderate, not very slender. *Long*, 2 mm.

♀. Pale yellow, apex of mandibles and teeth reddish-brown, eyes, ocelli and a spot at insertion of fore wing black. Larger, but with structure, etc., except the usual differences, much as in the ☿. The *mandibles* and *apical tooth* are longer; *eyes* and *ocelli* well formed; *wings* somewhat dusky, one *cubital cell*, no *discoidal cell*, *radial cell* closed. *Long*. 3·4 mm.

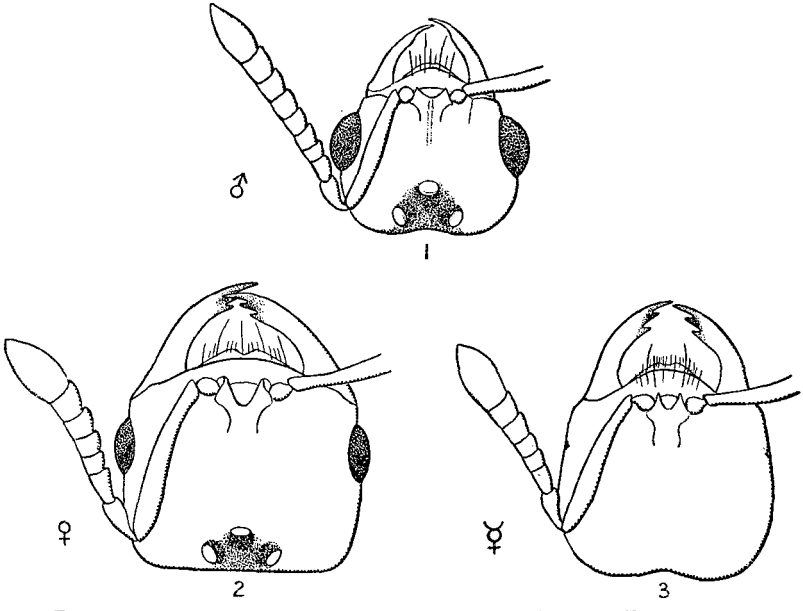
♂. Smaller than the ♀, dirty brownish yellow, head blackish. *Eyes* large; *ocelli* moderate; *mandibles* thin, curved, with an angulation near apex (but no teeth); *apical tooth* pointed; *antennae* 10-jointed; *node* of *petiole* rather large, rounded above, anterior and posterior surfaces flat. *Wings* as in ♀. *Long*. 2·3 mm.

Described from a number of workers, eight winged females and two males taken by M. René Paul Robá at the roots of coffee, associating with a small Coccid, at La Esperanza, Colombia, S. America, in April, 1935.

Holotype ☿, allotype ♂ and ♀ and paratypes in the British Museum (Nat. Hist.).

The genus *Acropyga* Roger is divided into four subgenera: (1) *Acropyga* s. str., (2) *Atopodon* Forel, (3) *Malacomyrma* Emery and (4) *Rhizomyrma* Forel. The first two of these occur in the Indo-Malay and Papua-Australia regions; the third, of which there is only one species known, has only been found in Eritrea; and *Rhizomyrma*, besides having a similar distribution to the first two, is also found in Central and South America.

All the species of the genus are very hypogaeic in their habits, living at the roots of plants, and keeping root-Coccids, which they help to disseminate.



Head of *Acropyga robae* :—Fig. 1, male; Fig. 2, female; Fig. 3, worker.

Some of the species have been proved to be injurious to cultivated plants on account of these habits. Dr. N. Annandale in India (as quoted by Prof. Silvestri in 1924) and Dr. G. H. Bünzli in Surinam (in a letter to Prof. Wheeler in 1932) have described how the female ants, when they leave the nests for the marriage flight, carry with them in their jaws a young female root-Coccid which they place on the roots of the plants where they found a new colony. Bünzli published, in 1935, a voluminous paper dealing with his observations and experiments in the coffee plantations at Surinam. There he studied two species of *Rhizomyrma*, and he shows that they cause considerable injury to the

coffee by transplanting root-coccids to new, healthy plants. These coccids not only suck the sap of the coffee roots, but also infect the plants with pathogenic organisms. As very many female ants are produced in the nests, which are often numerous in the coffee plantations, it will be seen how real a danger these ants may become.

The following is a list of all the known species of neotropical *Rhizomyrmae*, showing the date of publication, localities, length, number of joints to the antennae, and teeth to the mandibles, in the workers, females and males:

Species.	Date of publication.	Patria.	Length (mm.).	Joints of antennae.	Teeth to mandibles.
Workers.					
1. *R. decedens* Mayr	1887	Brazil	2–2·5	9–11	4
2. *R. göldii* Forel	1893	,,	2–2·3	9–11	4
3. *R. pachycera* Emery	1905	,,	2·2	9	4
4. *R. exsanguis* Wheeler	1909	Mexico	1·4–1·6	8–9	3
5. *R. fuhrmanni* Forel	1913	Colombia	1·7–1·9	8	4
6. *R. parvidens* Wheeler & Mann	1914	Haiti	1·8–2	10	4
7. *R. marshalli* Crawley	1921	Barbados	2	10–11	3
8. *R. wheeleri* Mann	1922	Honduras	1·5	9	3
9. *R. pickeli* Borgmeier	1927	Brazil; Surinam	2–2·2	10–11	4
10. *R. bruchi* Santschi	1929	Argentina	2	9	3
11. *R. paramaribensis* Borgmeier	1933	Surinam	1·8	7–8	3–4
12. *R. rutgersi* Bünzli	1935	,,	2·4–3·2	9–11	3–4
13. *R. berwicki* Wheeler	1935	Trinidad	1·5–1·8	8	4
14. *R. robae* sp. nov.	1936	Colombia	2	8	3
Females.					
1. *R. decedens* Mayr	1887	Brazil	3–3·3	10	4
3. *R. pachycera* Emery	1905	,,	3·7	9	4
5. *R. fuhrmanni* Forel	1913	Colombia	2·5–2·7	8	4
8. *R. wheeleri* Mann	1922	Honduras	2	9	3
9. *R. pickeli* Borgmeier	1927	Brazil; Surinam	2·8	11	4
11. *R. paramaribensis*. Borgmeier	1933	Surinam	2·5	7–9	3
12. *R. rutgersi* Bünzli	1935	,,	3·6–4·8	10–11	3
14. *R. robae* sp. nov.	1936	Colombia	3·4	8	3
15. *R. smithi* Forel	1893	St. Vincent	2·1	7	4
Males.					
1. *R. decedens* Mayr	1887	Brazil	2	11	"Deutlichen Zähne"
9. *R. pickeli* Borgmeier	1927	,, Surinam	1·3–1·6	9	..
11. *R. paramaribensis* Borgmeier	1933	,,	2·2	10	3–4
12. *R. rutgersi* Bünzli	1935	,,	2·8–3	12	3
14. *R. robae* sp. nov.	1936	Colombia	2·3	10	1
16. *R. dubita* Wheeler & Mann	1914	Haiti	2	12	3

LITERATURE.

I have actually looked up all the publications on the different species and their bionomics, but they are too numerous to list here. References to nearly all of them, however, will be found in the papers quoted below.

BÜNZLI, G. H.—" Untersuchungen über coccidophile Ameisen aus den Kaffeefeldern von Surinam," 1935, *Mitt. Schweiz. Ent. Ges.*, **16** : 455–593.

EMERY, C.—1925, *Genera Insectorum* : Formicinae, fasc. 183 : 27–31.

SILVESTRI, F.—" A New Myrmecophilous Genus of Coccidae from India," 1924, *Rec. Indian Mus.*, **26** : 311–315.

WHEELER, W. M.—" Ants of the Genus *Acropyga* Roger, with Description of a New Species," 1935, *Journ. New York Ent. Soc.*, **43** : 321–329.

WICKEN FEN FUND.—This fund is raised annually by entomologists and other nature-lovers to assist in defraying the expenses incurred by the custodians of Wicken Fen, the National Trust, in administering the Fen, preserving the fauna and flora, and in providing a watcher. The Fen is unfortunately very inadequately endowed, and its maintenance places a severe strain on the resources of the custodians, who for many years have had to contribute a considerable sum of money annually towards its upkeep. Of late, owing to the lack of funds for cutting, etc., the reed has greatly increased its growth, to the detriment of other plants, and, therefore, the fauna dependent upon them. In consequence of the representations and actions of certain entomologists who are members of the Committee of Management, supported as they have been by the Royal Entomological Society of London, an effort is being made to remedy this by cutting the reed during the summer, thereby weakening its growth, and ultimately eliminating some of it, but of course the extent to which this can be done depends entirely upon the amount of money available. It is earnestly hoped, therefore, that every nature-lover who possibly can will contribute towards this very desirable object, and will send his or her contribution as soon as possible to the Hon. Treasurer, W. G. SHELDON, West Watch, Oxted, Surrey, who will be pleased to send permits for observation or collecting to subscribers on application. The amount subscribed in 1935 was £120 17*s.* 6*d.*

GONEPTERYX RHAMNI : NOTE ON THE LARVAE.—The question raised by Mr. Burkill on the position taken up by the larvae of *G. rhamni* is interesting. But I have found, except when first hatched, or a day or so old, that with very few exceptions they lie on the upperside either along the midrib or against one of the other ribs when young, and invariably along the midrib when older. I am speaking of only when in a wild state. I have always found the quite young larvae are easy to find by examining the young shoots that are eaten, and nearly always not more than about 5 ft. from the ground.—F. W. FROHAWK ; April, 1936.