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*S. Afr. J. Agric. Sci.* (1965), 8, 1021-1024

Printed in the Repub. of S. Afr. by The Government Printer, Pretoria

## AFRICAN FORMICIDAE (HYMENOPTERA). DESCRIPTION OF A NEW SPECIES

(*Met opsomming in Afrikaans*)  
 (*Avec résumé en français*)

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### ABSTRACT

A description of a new species of *Ocymyrmex* is given. Although the outline of the abdomen is similar to that of *O. barbiger*, it differs from the latter by the concave dorsum of the thorax

### INTRODUCTION

The granivorous ants of the genus *Ocymyrmex* are confined to the Ethiopian region and of the fourteen species, subspecies and varieties which are known, only four have been recorded from the Republic. These ants prefer the drier parts of the country. They are very quick in their movements and are well-adapted to warm semi-arid areas. One often finds bare areas around the nests of these ants and it is quite possible that they are responsible for the damage done to the grass in these regions. Although they are highly granivorous, they will readily attack and destroy other insects; in the Kruger National Park *O. weitzckeri arnoldi* Forel was observed to capture the workers of the leaping-ant *Odontomachus haematodes* and of termites (Prins, 1963).

On a recent tour a new species was collected in the Upington district which is somewhat smaller than the other recorded species and which is described and illustrated here. It was compared with descriptions of *O. robecchii nitidulus* by Emery (1892), *O. weitzckeri hirsutus* and *O. laticeps* by Forel (1903, 1910) and *O. weitzckeri fortior* and *flaviventris* by Santschi (1911, 1913) and was found to be entirely different from these ants which do not occur in the South African subregion.

### DESCRIPTION OF NEW SPECIES

***Ocymyrmex cavatodorsatus* spec. nov.** (Fig. 1 and 2)

#### *Material*

Fourteen ♀♀ from Louisvale, District Upington (Cape Province, S. Afr.), (AcAx. 3412), A. J. Prins, 6.viii.1964.

#### *Types and paratypes*

Types and paratypes in the National Collection of Insects, Research Institute for Plant Protection, Pretoria.

Received on 19 October 1964

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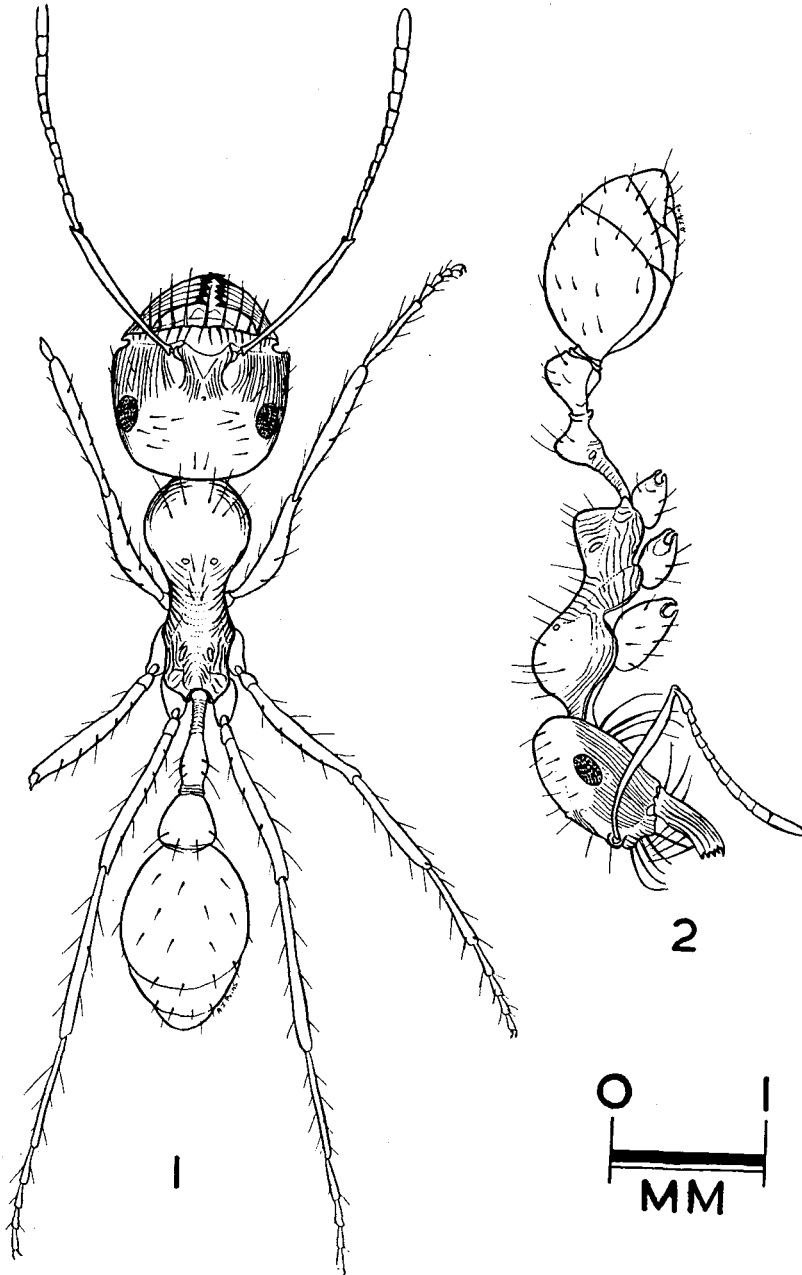


FIG. 1.—Worker, seen from above/*Werker, rugaansig*  
FIG. 2.—Worker, seen from the side/*Werker, syaansig*

*Worker*

Length: From tip of mandibles to apex of abdomen 4.5 mm, from anterior border of clypeus to apex of epinotum 2.36 mm; length of thorax, 1.41 mm; length of head, excluding mandibles, 1.02 mm.

Head, mandibles, antennae and legs bright red, the anterior angles of the head dark brown to almost black, the masticatory margin of the mandibles black. Thorax and petiole slightly darker than the head, almost brick red, the pronotum and first node of the petiole, however, lighter in colour than the rest of the thorax; the second node almost piceous. Abdomen piceous.

The insect as a whole is fairly shining and in some specimens the colour of the head, antennae, legs, thorax and first node of the petiole is light red to yellowish red; the femora and coxae almost piceous as in the case of the second node of the petiole.

Pubescence absent, except on the flagellum and tarsi; pilosity consisting of fairly long erect and semi-erect yellowish hairs on the body and legs. The inner margin of the mandibles and anterior margin of the clypeus each with a row of long, curved hairs. Ventral surface of mandibles with a few long hairs, curving inwards, and the ventral surface of the head also with a semi-circular row of long hairs, curving towards the mouth.

Head, excluding the mandibles, about as long as wide, slightly wider in front than behind; the posterior angles rounded and the posterior margin slightly convex. Eyes convex, about as long as the frontal carinae and placed at about the middle of the sides of the head. Frontal carinae short, raised in front, divergent behind; the frontal area triangular and well-defined. Clypeus raised in the middle as in *O. barbiger* Emery (Arnold, 1915) and very convex transversely, but not projecting over the mandibles as in the latter species; the anterior margin almost straight and not excised in the middle.

Anterior half of the head finely and longitudinally striate, the striae below the eyes extending to the posterior margin, the striae between the frontal carinae oblique on each side, almost obliterated anteriorly, giving this area a smooth and shining appearance; posterior half of head smooth and shining. In the middle of the smooth area between the oblique striae of the frontal carina and almost in the middle of the head is a small shining tubercle, clearly visible even under low magnification. Clypeus with fewer and stronger striae dorsally, those in the middle not entirely reaching the posterior margin; its anterior face almost vertical and smooth and shining. Antennae smooth and shining, the scape extending beyond the hind margin of the head by the length of the second segment of the flagellum; first segment of the flagellum as long as the second and the third segments together, all the segments longer than wide.

The mandibles nitidulous, strongly striate longitudinally, the masticatory margin with five teeth, the apical one large and acute.

Thorax slightly more than twice as long as wide across the pronotum, the sutures obsolete, only faintly indicated at the sides; the prothoracic portion rounded in front, at the side and above; the sides of the median and hind portions almost straight as in *O. barbiger*. Seen from the side the dorsum is very concave in the region of the meso-epinotum and inclined towards the apex of the epinotum; the face of the declivity smooth and shining, nearly vertical, meeting the dorsum in a fairly acute angle, differing from *O. barbiger* and *O. weitzeckeri* Emery (1892) in that the dorsal plain of the meso-epinotum is much lower than that of the rounded

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prothorax; the latter smooth and shining with a few coarse striae at the sides. Meso-epinotum shining with transverse rugae which are almost obsolete above; the sides coarsely, longitudinally and obliquely striate.

Nodes of the petiole smooth and shining; first node conical, about as high as long, and about one-third longer than wide with two or three transverse striae at its posterior margin; the peduncle almost as long as the node, transversely striate, the striation fairly strong towards its junction with the node and rather feeble in front. The second node campaniform, nearly twice as wide as the first and about as long as wide behind; seen from above twice as wide behind than in front; seen from the side about as high as long and fairly convex above.

The legs moderately long and slender, smooth and shining; the hind legs with the first tarsal segment about as long as the second to fifth segments together and about two-thirds the length of the tibia.

Abdomen smooth and shining, oval, about one-third longer than wide; the first segment about as long as wide and about twice as long as the remaining segments together.

This species resembles *O. barbiger* in the outline of the first segment of the abdomen which is evenly convex and not subpedunculate as in *O. weitzckeri*. It may be distinguished from the first-mentioned species by the very concave dorsum of the thorax and by the smooth and shining pronotum.

### *Opsomming*

#### *AFRIKAANSE FORMICIDAE (HYMENOPTERA). BESKRYWING VAN 'N NUWE SPESIE*

*'n Nuwe spesie van die grasdraer miere van die genus Ocymyrmex is by Louisvale ten suidweste van Upington versamel, die beskrywing waarvan hier gegee word.*

*Hoewel dit baie ooreenkom met O. barbiger wat die agterlyf betref, kan dit van laasgenoemde geskei word deur die kenmerkende holrug en glansende voorkoms.*

### *Résumé*

#### *LES FORMICIDAE D'AFRIQUE (HYMENOPTERA). DESCRIPTION D'UNE NOUVELLE ESPECE*

*On donne la description d'une nouvelle espèce de fourmis moissonneuses d'herbe, appartenant au genre Ocymyrmex, et capturée à Louisvale, au Sud-Ouest d'Upington.*

*Bien que cette espèce ressemble assez fort à O. barbiger en ce qui concerne l'abdomen, elle peut être distinguée de cette dernière par le creux caractéristique du dos et son aspect lustré.*

### REFERENCES

- ARNOLD, G., 1915-1924. A monograph of the Formicidae of South Africa. *Ann. S. Afr. Mus.* 14, 194-200.  
EMERY, C., 1892. Sopra alcune Formiche raccolte dall' Ingegnere L. Bricchetti Robecchi nel paese dei Somali. *Ann. Mus. Genova*, 32, 114-116.  
FOREL, A., 1903. Einige neue Ameisen aus Süd-Angola. Baum—"Kunene-Sambesi Expedition", p. 561.  
FOREL, A., 1910. D. Formicidae. Forschungsreise in Süd-Afrika, 4, 12-13.  
PRINS, A. J., 1963. A list of ants collected in the Kruger National Park with notes on their distribution. Koedoe No. 6.  
SANTSCHI, F., 1911. Nouvelles Fourmis du Congo et du Benguela. *Rev. Zool. Afr.* 1, 209.  
SANTSCHI, F., 1913. Mélanges Myrmécologiques. *Ann. Soc. Ent. Belg.* 57, 431.