

# B O C A G I A N A

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## A NEW SPECIES OF *CONOSTIGMUS* (INSECTA : HYMENOPTERA, CERAPHRONOIDEA) FROM MADEIRA.

By M. W. R. de V. Graham \*

With 2 figures

**SUMARIO.** Uma nova espécie, *Conostigmus fanalensis* (INSECTA: HYMENOPTERA, CERAPHRONOIDEA) da Madeira é descrita, indicando-se várias localidades onde foi encontrada. Na sua descrição o comprimento da base das antenas não inclui a radícula.

Amongst the parasitic Hymenoptera collected in Madeira by my wife and me during 1982, I noticed an unusual species belonging to the genus *Conostigmus* Dahlbom, which was formerly placed in Proctotrupoidae but is now assigned to the more recently recognized superfamily Ceraphronoidea, family Megaspilidae. The species of this superfamily are many and sometimes difficult to distinguish from each other. I have decided to describe the Madeiran species after having examined a number of European *Conostigmus* and searched the literature extensively without finding any species that agrees with it.

\* 5, Salisbury Crescent, Oxford OX2 7TJ, U.K.

My thanks are again offered to my wife for her assistance, and to Mr. G. E. Maul, Museu Municipal do Funchal, for his continued interest in and help with our study of the Madeiran insect fauna.

In the following description, the length of the antennal scape does not include the radícula. The measurement POL is taken as the distance between the inner edges of the lateral ocelli, OOL as that between their outer edge and the adjacent eye.

*Conostigmus fanalensis* sp. n.

(Figs. 1, 2)

♀. Black or brownish-black; lower part of frons, and face, tending to be reddish; pronotum, mesoscutum and propodeum usually partly or wholly dull reddish, sometimes also the subbasal constriction of the metasoma, behind the «neck». Antennae blackish, scape tending towards reddish in proximal half, pedicellus usually reddish at tip and beneath. Legs dull reddish, the femora and tibiae sometimes more or less infusate. Length of body, 1.2 - 1.7 mm.

Head (Fig. 1) 2.1 - 2.15 times as broad as mesoscutum, viewed dorsally 1.4 - 1.5 times as broad as long; temples about 0.65 length of eyes, curved. Ocelli very small, in a nearly equilateral triangle; POL about 0.8 OOL. Slightly behind the lateral ocelli is an impressed transverse line, which expands into a shallow fovea behind each ocellus. This transverse line is joined by a weak median longitudinal furrow which extends forwards from the occipital carina, the latter narrow and sharp. Eyes separated by 1.15 times their length, with moderately long pilosity. Malar space about 0.4 length of eye. Upper edge of antennal toruli joined by a sharp transverse carina, above which is a large subtriangular or semicircular fovea; frons otherwise convex. Vertex strongly convex. Head moderately shiny (less so on vertex) with extremely fine superficial or engraved isodiametric reticulation, and densely pilose with moderately long hairs. Antenna (Fig. 2): scape length slightly less than head height; combined length of pedicellus and flagellum about twice breadth of head; pedicellus about 3 times as long as broad, slightly longer than first segment of flagellum, the latter not quite as thick as the pedicellus and 2.0 - 2.5 times as long as broad, the following segments becoming gradually thicker but shorter, segments 5 to 8 very slightly longer than broad; club about 3 times as long as broad and longer than the two preceding flagellar segments together.

Mesosoma about 1.6 times as long as broad. Pronotum medially about 0.5 length of mesoscutum, with a prominent neck, rather matt with granulate-reticulate sculpture, densely pilose. Mesoscutum about 1.6 times as broad as long, somewhat shiny, thickly clothed with rather short hairs; notauli distinct, convergent and nearly straight posteriorly, moderately curved in front; median line weak, usually indicated only in front. Scutel-

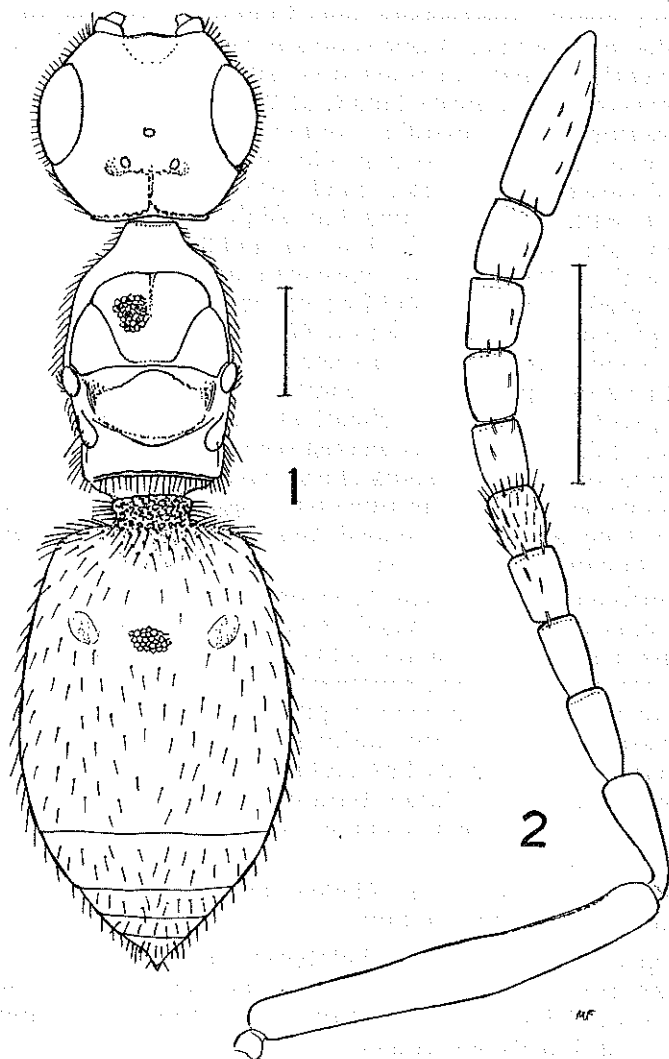


Fig. 1. — *Conostigmus fanalensis* sp. n., female, body. Fig. 2. — The same, left antenna of female.

Note : The pilosity of the head and mesosoma is indicated only at the edges. The type of sculpture present on the mesoscutum and metasoma is shown by small circular areas, to the same scale. The scale lines equal 0.2 mm.

lum nearly 1.5 times as broad as long, sculptured like the mesoscutum ; hind margin slightly depressed and forming a border or seam which overlaps the metanotum. Axillo-scutellar furrows shallow, not foveolate, meeting slightly behind the transverse suture. Dorsal face of propodeum about 3 times as broad as its length at the sides, with a sharp transverse carina bordering its hind margin ; surface matt, with very fine but slightly raised granular sculpture, densely clothed with reclinate hairs ; median longitudinal carina obsolescent ; hind corners obtuse. Sides of mesosoma nearly matt, with extremely fine but slightly raised reticulation, thickly pilose with rather short hairs (few on middle of mesopleuron). Side of pronotum with a deep curved impressed line extending from the dorsal neck to the lower margin behind fore coxae. Mesopleuron slightly convex ; scrobal impression distinct ; suture between meso- and metapleuron not foveolate. Sternaulus weak or obsolescent. Mesosternum very short (median length hardly greater than length of coxa of mid leg) and strongly transverse, with very broad trochantal lobes ; surface rather dull, finely granulate-reticulate. Wings absent, represented by two small oval tubercles on each side of the mesosoma. First tarsomere of mid and hind legs nearly or quite as long as the remaining segments, that of hind leg about 7 times as long as broad. Second spur of mid tibia somewhat shorter, and much thinner, than the first.

Metasoma ovate, much broader than mesosoma, slightly longer than head plus mesosoma ; basal «neck» slightly more than one-third the width of the base, matt, sculptured like the propodeum, hairy ; constriction delimiting the neck shallow, reticulate but without striae ; behind and at the sides of the neck is a zone of pilosity the hairs of which arise from minute tubercles ; rest of the surface moderately shiny proximally, more shiny caudad, with extremely fine alutaceous sculpture ; surface, excepting a subbasal area on the large tergite, moderately thickly clothed with rather long hairs ; gastrocoeli obliquely transverse.

♂. Unknown.

Holotype ♀ : Madeira, Alagoa do Fanal, 28.vii.1982 (Graham) in British Museum (Natural History).

Paratypes : same data as holotype, one ♀ ; Fanal de Cima, in a Til-wood, 28.vii.1982, two ♀ ♀ ; Vinte e Cinco Fontes, near Rabaçal, 27.vii.1982, two ♀ ♀ ; Caldeirão Verde, 9.viii.1982, three ♀ ♀ ; Queimadas, 11.viii.1982, one ♀ ; in BMNH and author's collections.

*C. fanalensis* differs from the other *Conostigmus* I have seen in its thickly pilose body ; atrophied wings ; metasoma not striate at base but with a zone of dense pilosity there, rest of metasoma alutaceous ; mesosternum very short. In the pilosity of the metasoma it somewhat resembles *C. geniculatus* (Kieffer) (= *Dichogmus geniculatus* Kieffer) as redescribed and figured by Dessart (1973) but the pilosity of the head and mesosoma is much shorter than in that species, the metasoma is not striate at base,

besides other differences. The new species is named after the beautiful region of the Fanal, our visit to it being recalled with much pleasure.

All the specimens were swept from low herbage or litter in damp shady situations, in or at the edge of remnants of native forest. The biology of *Conostigmus* species is poorly known. Some are parasites of Diptera (e. g., Syrphidae) ; several have been found in nests of various ants.

#### REFERENCES

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CORRECTION :

On page 2, line 17 : instead of «2.1 - 2.15» read «1.35 - 1.45».