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A REDESCRIPTION OF *SYRPHUS MECOGRAMMA* BIGOT, AND A
NOTE ON THE OCCURRENCE OF PROBABLY THE SAME SPECIES
IN SCOTLAND (DIPTERA)

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BIGOT described *S. mecoγραμμα*, as a species of *Lasiophthicus* Rnd., in 1860, from specimens taken in Sicily, and there are two females, one large and one smaller, so labelled in his collection. Both these specimens have the abdomen discoloured in such a way as to cause Bigot to select the "trivial" name *mecoγραμμα* for the species. This discoloration is partly due to the failure of some of the dark parts to assume more than a chestnut-brown colour, and partly to the presence of two converging longitudinal lines of internal discoloration *crossing the middle of the yellow bands* on third and fourth tergites. In 1866 Rondani published brief extracts from Bigot's description without having seen the species, but no one has recognised the species from Bigot's description. The following supplementary details may therefore prove useful.

Annal. Soc.
Ent. France,
ser. 3 VIII: 778

Atti Soc. Ital.
Sci. Nat. Milano
XI: 28

The hairy eyes are rather narrowly and equally separated for rather less than one-third of the distance from vertex to base of antennae, and this narrower part is black and somewhat shining (except on actual occipital margin), with its front margin slightly tridentate (at eye-margins and at middle); rest of frons rapidly widening out, and dusted greyish-white, concealing a yellow ground colour, except for an indefinitely margined, triangular area above antennae, which area includes two dark brown very closely approximated lunules, each one somewhat angulated above. A narrow brownish band extends over facial prominence down to front mouth-edge; jowls above sides of mouth-opening yellowish, but posterior part (below eyes) with a tendency to become brown.

Thoracic disc, except at sides, with only faint dusting, not sufficient to prevent it appearing shining; all pubescence, including that on base and margin of scutellum, pale, but fine and dark on disc of scutellum. Postalar calli, and (less distinctly) supra-alar area, yellowish. Metasternum bare.

Abdomen with beaded edges, and all the yellow bands (or almost straight lunules) going over the edges, but bands on third and fourth tergites only for about the anterior half of their width. The yellow markings on second tergite meet in middle in the smaller specimen but not in the larger (more normal) specimen; they are narrow, but tapering towards inner ends, slightly concave in front, convex behind; in both specimens these markings extend upwards along sides of tergite to its base, but this may be due to lack of intensity of colour in the dark areas in these specimens as mentioned above. There is a yellow patch at sides of first tergite. The yellow markings on third and fourth tergites have the appearance of narrow, very flat, lunules, connected together at middle to form a band, each half of the bands very slightly concave in front, but the hind margin of the complete band almost straight except for a small excision at middle. They all have a whitish sheen when viewed from the side in certain lights. Hind margins of fourth and fifth (and sometimes of third) tergites, and sides of fifth tergite (especially about base), yellowish.

Legs yellow except coxae and trochanters, tarsi somewhat brownish; in the smaller specimen tarsi almost all yellow. Both middle and hind coxae bare behind. All pubescence about base of legs whitish, similar to that on pleurae.

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Wings with microtrichia sparser than usual, especially on basal half (a condition usual in the *luniger*-group). Cubital vein curved as in the *luniger*-group, and ending slightly before tip of wing. Halteres yellow.

A specimen in Bigot's Collection from Corsica standing under the label "*Ischyrosyrphus ?annulipes* Zett." must be a male of *mecogramma*. It differs only in that the basal pair of abdominal lunules do not extend to the sides of second tergite, nor along the side upwards to base of that tergite, except in an indistinctly brownish-red colour, but there is a yellowish patch at side margins of first tergite; also the basal third of anterior, and basal two-thirds of hind, femora, are brownish. Frons yellow, slightly dusted greyish, with dark lunules above antennae similar to those of female; upper angle of frons slightly less than 90°. In all other respects similar to the type females though without their abnormal internal dark markings on abdomen. The genitalia of this male are quite typical of the *luniger*-group, therefore in spite of its hairy eyes it must surely belong to that group, with which it also agrees in wing-venation.

It is a remarkable fact that a female, which I cannot satisfactorily distinguish from the above Mediterranean species, was captured by the Rev. James Waterston on 19th August 1905 at "Arniston", presumably a locality near Dalkeith (Edinburgh). This specimen was originally in the late A. E. J. Carter's Collection, and is now in mine. It is not discoloured as in the type females, and consequently is more like the male from Corsica. Moreover the basal yellow abdominal markings (as in that male) do not extend to the side margins, or along these margins to the base of the second tergite, and the four anterior femora are slightly brownish about base, and the hind femora brownish for quite two-thirds of their length, very much as in the male. These colour differences in a single female specimen appear to be outweighed by a marked similarity in all other respects with the apparently immature, or at least discoloured, type females.

The only British species with somewhat similar abdominal markings is *S. tricinctus* Fln., but in that species the basal pair of spots are always smaller (or even absent) and the other bands practically on the base of the tergites, moreover the antennae are black, the female frons much more extensively black, the cubital vein straighter, wing "stigma" blacker, and it is in many other characters abundantly distinct. *S. posticatus* Beck. (1920) ♀ from Spain must be very much like *mecogramma* according to the description, and the figure given of abdomen.

The possibility that the occurrence of this strange species of *Syrphus* near Edinburgh was accidental cannot be overlooked. The seaport of Leith is not far away, and the importation, undamaged, of Syrphid pupae in a cargo of merchandise from the Mediterranean area by no means impossible.