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Two new Spanish species of *Dicranomyia* STEPHENS, 1829, related to *D. (s.str.) goritiensis* (MIK, 1864) (Diptera, Limoniidae)

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Dicranomyia spinosissima sp. n. and *Dicranomyia eulaliae* sp.n. are described from Spain, and some comments on relationships between the new species and the complex of species of *D. goritiensis*-group are given.

Keywords: *Dicranomyia spinosissima* sp. n., *Dicranomyia eulaliae* sp.n., *D. goritiensis*-group, Spain

INTRODUCTION

In 1984, SAVCHENKO dealt with the species of the so-called *Dicranomyia (s.str.) goritiensis* group. Two species were described by him and altogether five were treated as belonging to the group, viz. *D. (s.str.) goritiensis* (MIK, 1864); *D. (s.str.) circassica* LACKSCHEWITZ in LACKSCHEWITZ & PAGAST, 1941; *D. (s.str.) tessulata* (SAVCHENKO, 1974); *D. (s.str.) clathrata* SAVCHENKO, 1984 and *D. (s.str.) melanantha* SAVCHENKO, 1984³.

Although it would be somewhat premature to formally establish a separate species group for the species in question, they, nevertheless, appear to constitute a monophyletic unit, with the centre of distribution suspected in Central Asia and the Mediterranean. The characterization of the group, as provided by SAVCHENKO (1984), should be corrected in that the (longitudinal) veins are not bare in these species, except for Sc₁. In the present paper, two further species are described from Spain.

DESCRIPTIONS

Dicranomyia (s.str.) spinosissima sp. n.

Diagnosis

A comparatively large species within the group, generally appearing paler, including wing pattern, than the following one (but the type specimens may be somewhat discoloured by fading). Body brown, with silvery pruinosity, especially on pleura. Wings long and narrow, extensively patterned, with Cu intermittently streaked. Discal cell rather long. Body length 6.8-7 mm, wing length 9-10 mm.

³ *D. (s.str.) nigritorus* (ALEXANDER, 1975) from Iran, tentatively considered synonymous with *D. (s.str.) melanantha* by SAVCHENKO, 1989:302, likewise belongs there.



Fig. 1. *D. spinosissima* sp. n. Holotype, genitalia in dorsal view.

Male

Head generally brown, silvery pruinose on frons and around eyes. Rostrum and antennae paler, yellowish brown, the latter with flagellomeres long-oval, spindle-shaped distally. Verticils a little longer than respective flagellomeres.

Thorax brown to dark brown, subshining, with silvery pruinosity, especially on pleura, less so on prescutum. The latter with pattern of silvery pruinosity, suffused with brownish towards middle, that allows penetration of four brown, subshining stripes. Two median stripes incompletely separated by narrow line, most distinct at mid-length. Pruinosity on pleura not even and continuous but broken by undusted brown spots and streaks. Katepisternum with several setae. Wings considerably long and narrow, with extensive pattern essentially corresponding to that of other related species but paler: four patches near anterior margin, proximal one,

situated just beyond arculus, distinct and large, reaching as far as Cu; M slightly but continuously seamed; cross-veins and tips of longitudinal veins with extensive darkenings, the one, over tip of Cu, especially large; Cu, as usual, intermittently (and variably) streaked, with pale interspaces mostly taking less than half the length of the vein; no dots in wing cells. Venation generally usual for the genus. Discal cell rather long, longer than medial veins emitting from it. Halteres relatively short, their length not correlated with considerable length and slenderness of wings, stem pale yellow, knob infuscated. Legs long, yellow, with femora narrowly ringed with dark brown at extreme tips.

Abdomen dark brown, with posterior margins of tergites narrowly yellowish. Male genitalia (Fig. 1): Tergite 9 with deep V-shaped excision reaching proximally beyond half the length of the tergite; margins of excision somewhat sinuous; lateral lobes accordingly high, broad and rounded. Gonocoxite stout, cylindrical, almost straight, ventromesal lobe generally short, oval. Outer gonostyle subequal in length to gonocoxite, essentially crescent-shaped, rounded apically, its inner side densely set with minute spines. Ventral side of outer gonostyle conspicuously swollen near base. Rostral prolongation of moderate length, curved, with spines divergent, not considerably apart, the longer, gently curved one, positioned near apex of rostrum, the shorter and almost straight one at about mid-length of rostrum, somewhat shifted onto dorsal side of the latter. A finger-like lobule, with distal portion provided with short, black spines or bristles, arises from lower dorsal face of outer gonostyle and extends between inner and outer gonostyles to about half the length of the latter. Inner gonostyle pale, relatively slender, evenly curved through about 90 degrees. Aedeagal complex with parameres slightly pigmented, their inner portion sinuous, subacute at tip, outer portion broadly rounded. Penis moderately curved downwards, gradually tapered distally.

Female

In general appearance resembling the male. Female genitalia with cerci and valves nearly straight; valves reaching beyond $\frac{2}{3}$ of the cerci.

Type material

Holotype ♂: Spain, Segovia, La Granja, 23.ix.1950 (F. SCHMID); deposited in Musée de zoologie, Lausanne, Switzerland.

Allotype ♀: same data as holotype; deposited in Musée de zoologie, Lausanne, Switzerland.

Paratypes: 2 ♂♂, same data as holotype; deposited in coll. J. STARY, Olomouc, Czech Republic, and Musée d'Histoire naturelle de la Ville de Neuchâtel, Switzerland.

Derivation of name: the new species is named *spinosissima* (adjective in nominative singular) according to very numerous fine spinules on inner side of the outer gonostyle.

Dicranomyia (s.str.) eulaliae sp. n.

Diagnosis

A medium-sized species. Body dark brown, with silvery pruinosity, especially on pleura. Wings patterned as usual in the group, Cu with single pale interspace just

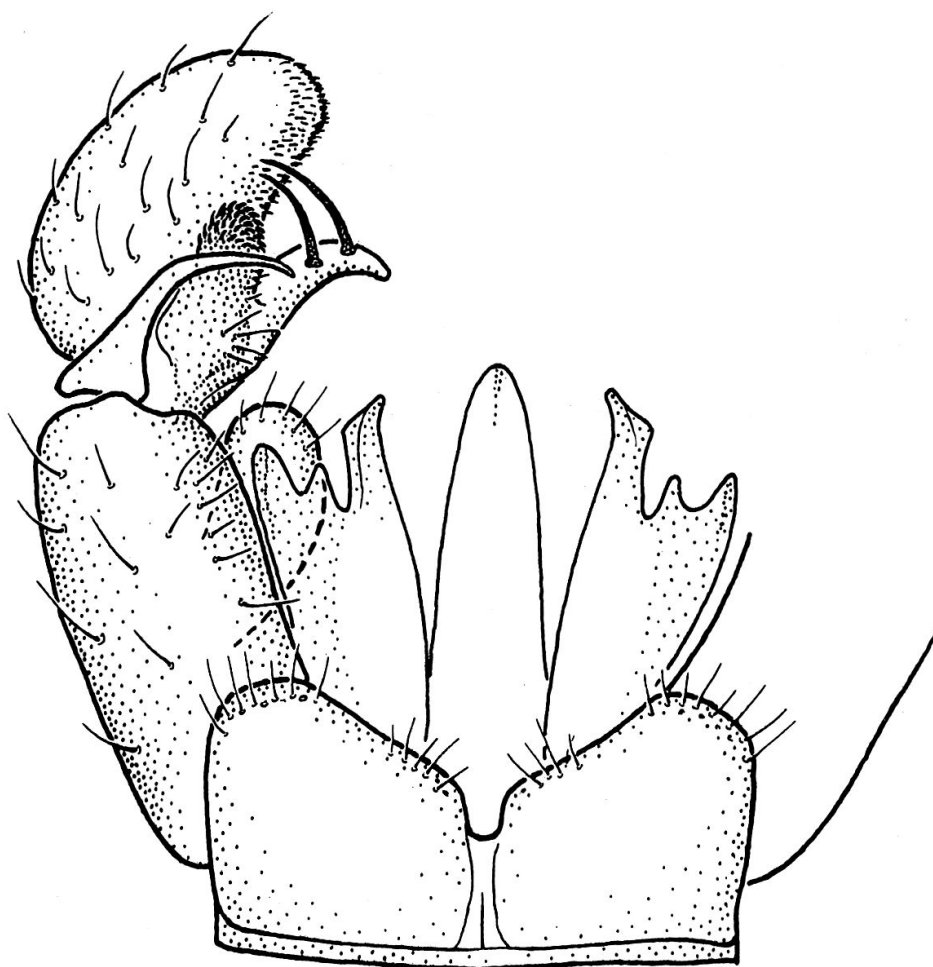


Fig. 2. *D. eulaliae* sp. n. Holotype, genitalia in dorsal view.

before m-cu. Cross-vein m-cu more than its own length before small, short discal cell. Body length 5 mm, wing length 7.5 mm.

Male

Head dark brown to blackish, greyish pruinose on frons and around eyes. Rostrum and antennae dark brown, the latter shorter than in the preceding species, with flagellomeres almost spherical at base, oval to long-oval distally. Verticils subequal in length to respective flagellomeres.

Thorax dark brown, subshining, with silvery pruinosity, especially on pleura. Prescutum with three dark brown, subshining stripes. Pruinosity separating lateral stripes from median one somewhat suffused with brownish. Median stripe not bisected distinctly, with only traces of separating line posteriorly. Pleura almost evenly silvery pruinose. Katepisternum with several setae. Wings with dark pattern less extensive than in *D. spinosissima* sp. n. but more contrasting, otherwise, however, similarly distributed; basal patch near anterior margin indistinct; Cu almost continuously seamed, with single pale interspace just before m-cu, subequal in length to the latter cross-vein; no dots in wing cells. Venation with discal cell rather small, short, not as in *D. spinosissima* sp. n., slightly shorter than medial veins emit-

ting from it. Although the tendency to retraction of m-cu from the base of the discal cell is apparent in the species around *D. goritiensis*, in *D. eulaliae* sp. n., m-cu is conspicuously proximalized (or base of discal cell distalized), positioned more than its own length before base of discal cell. Halteres pale yellow, with knob considerably dark, even black. Legs yellow, dark rings at tips of femora broader than in *D. spinosissima* sp. n.

Abdomen dark brown, with posterior margins of tergites paler. Male genitalia (Fig. 2): In general structure similar to those of *D. spinosissima* sp. n. Tergite 9 shorter, with V-shaped excision shallower, reaching proximally to about half of its own length; lateral lobes shorter, somewhat truncate distally. Gonocoxite relatively slender, its ventromesal lobe short, oval. Outer gonostyle short, about two thirds the length of gonocoxite, as if compressed compared to that of *D. spinosissima* sp. n., with inner side only restrictedly set with very fine, minute spines and with ventral side conspicuously swollen near base. Rostral prolongation short, curved, with spines appearing convergent from some views, both curved and strongly pigmented, black, distal one longer than proximal one, correspondingly situated on rostrum as in *D. spinosissima* sp. n. but slightly longer and closer to each other. Spiniferous lobule on dorsal face of outer gonostyle short and stout, rather conical. Inner gonostyle pale, rather abruptly bent at obtuse angle beyond mid-length. Aedeagal complex with parameres slightly pigmented, their inner portion sharply cut at apex, outer portion shallowly emarginated, with two lobes. Penis shorter than in *D. spinosissima* sp. n.

Female

Unknown.

Type material

Holotype ♂: Spain, Brego, Ancares - Lugo, 26.ix.1984 (E. EIROA); deposited in coll. E. EIROA, Santiago de Compostela, Spain.

Derivation of name: the new species is dedicated to, and named after, its collector, Dr Eulalia EIROA of Santiago de Compostela (the species name is a noun in genitive singular).

DISCUSSION

The two new species, although clearly distinct, represent the closest relatives within the group. Apart from some external characters, indicated in the above descriptions (overall size, outline and pattern of wings, wing venation), they may, above all, be readily separated from each other by the structure of the male genitalia (cf. Figs. 1-2). As compared with the other, previously known species of the *D. goritiensis* cluster, only *D. melanantha* and *D. circassica* possess a spiniferous lobule on the dorsal face on the outer gonostyle (cf. SAVCHENKO, 1984, Figs. 2/2 and 3/1 respectively) and, of them, only the former (Fig. 3) exhibits some further hypopygial similarities. However, many details in the structure of the male genitalia prove unambiguously that *D. (s.str.) melanantha* is distinct from the two new species.

Setae on the katepisternum, present in both new species, are considered here an interesting trait, although not useful at the species level. The feature was not mentioned with any other species around *D. goritiensis*, being, actually, unknown within



Fig. 3. *D. melanantha* SAV., genitalia in dorsal view.

the European *Dicranomyia*. However, it was afterwards detected in *D. goritiensis*, *D. circassica* and *D. melanantha* and might serve as a useful character at a higher level.

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