Redescription and additional notes on Dixa tetraca Peus, 1934 (Diptera, Dixidae)

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ABSTRACT: The authors redescribe the species Dixa tetraca Peus, a species typical of the Canary Islands laurel forests. Figures of the male and female genitalia are provided, and the larva is figured and described for the first time. The habitat of the species is also described.
Key words: Diptera, Dixidae, laurel forest, Canary Islands.

RESUMEN: Los autores realizan una redescripción de la especie Dixa tetraca Peus, tópica de los bosques de Laurisilva de las Islas Canarias. Junto con las figuras de las genitalias masculina y femenina, se describe y dibuja por primera vez la larva, al tiempo que se comentan las características del hábitat de esta especie.
Palabras clave: Diptera, Dixidae, Laurisilva, Islas Canarias.

INTRODUCTION

BECKER (1908) first recorded the presence of the genus Dixa in the Canary Islands, attributing the single individual that he captured (1♂, La Laguna, recorded in his paper as a male) to the European species Dixa maculata Meigen, 1818. Subsequently, PEUS (1934) studied this specimen and described it as a new species: Dixa tetraca Peus.

STORA (in FREY, 1936) studied new material from Tenerife and referred it to Dixa tetraca: he provided a drawing of the male genitalia but did not described the morphological characteristics of this sex.

Over recent years further material has been collected from several of the Canary Islands, permitting a full redescription of the species.

Dixa tetraca Peus, 1934 (figs. 1-6)


All material have been collected by M. Báez; 2♀♀1♂ in the collection of R. Wagner, Limnologische Flussstation Schiltz, other specimens in collection of M. Baez.

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Description:

Head: eyes black, head medium brown, antenna also brown and mouthparts yellowish-brown. Thorax: mesonotum dark-brown with a y-shaped yellowish area just in front of the scutellum. The lateral sides of the thorax have two more yellow stripes. Legs brownish-yellow, the distal parts of the femora and tibiae are distinctly brown. Abdominal segments of both sexes are brownish all over; only in the males the dististyles are yellow.

\[ \text{Dixa tetrica Peus.-} \quad \text{Fig. 1: male genitalia, ventral view. Fig. 2: male abdomen and genitalia lateral view. Fig. 3: wing. Fig. 4: female genitalia, lateral view. Fig. 5: female genitalia, ventral view. Fig. 6: larval terminalia, dorsal view.} \]
Wings and halter: wing brownish translucent pigmented area around rm/rs. The colour pattern of the wing figured by Peus is nearly invisible. Wing length: male 3 mm, female 4 mm. Halter yellowish-brown.

Genitalia: Male: Basistyles seem to be fused in the middle. Dististyles slightly curved with medially bent tips. There are only a few distinguishing features. The species seems to be very close to D. submaculata Edwards, 1920. The lateral view of the genitalia shows the torsion of the genitalia by segments 7 and 8. Testes and ducti ejaculatorii are also clearly visible.

Female: Eighth sternit ovoid with a short distal prolongation. Processes of segment 9 are fused ventrally. The spermatheca is spherical with many small circular markings on its surface.

In both sexes the colouration of wings and body, and the shape of the genitalia reveal the relations between D. tetrica Peus and D. submaculata Edwards. Both species are distinguished by their distribution, differences in the genital structure and the colour pattern of the wing.

Habitat:

The larvae are usually found at the margins of small pools in humid zones, especially in the laurel forest. Adults are captured by sweeping the vegetation close to the larval habitats. The insects are, however, scarce in the islands.

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