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New genus of Gall-midges, *Dallaiella* Mamaev, Gen. nov. (Diptera, Cecidomyiidae)

ABSTRACT

NEW GENUS OF GALL-MIDGES, *DALLAIELLA* MAMAEV, GEN. NOV (DIPTERA, CECIDOMYIIDAE)

A new genus of gall-midges belonging to the subfamily Porricondylinae has been described with a new species, *Dallaiella petrosa* sp.n. This genus differs from other genera in the following characters: antennae of male with 2+11 antennomeres, ring-shaped sensoria on flagellomeres, strongly reduced eye bridge, narrow wings, vein M_{3+4} absent, tarsal claws simple, empodium well developed, tegmen of male genitalia with overlapping hooks.

Key words (in addition to those in title): free living gall midges, Italian fauna.

INTRODUCTION

New genus *Dallaiella* gen.n. belongs to subfamily Porricondylinae. This subfamily during last 30 years was revised four times (PANELIUS, 1965; MAMAEV, 1966; PARNELL, 1971; MAMAEV, 1990). According to last revisions 60 genera of Porricondylinae were investigated in Palaearctic and 27 genera in Nearctic regions.

Italian fauna of Porricondylinae had not been investigated. Only two species distributed in Italy - *Porricondyla nigripennis* (Meig.) and *Asynapta furcifer* Barn. were included in Catalogue of Palaearctic Diptera by M. SKUHRAVÀ (1986). Phytophagous gall-midges in Italy investigated much better.

MATERIALS AND METHODS

The new materials of free living gall-midges of subfamily Porricondylinae were collected in June-July 1994 mostly around Siena. Gall-midges were collected by netting over vegetation and immediately fixed in 70° alcohol. Specimens for microscopic investigation were mounted on special slides in Canada balsam.

Altogether nearly 20 species of gall-midges belonging to subfamily Porricondylinae were collected, including *Claspettomyia niveitarsis* (Zett.),

Colomyia caudata Spun., *Parepidosis arcuata* Mam., *Porricondyla nigripennis* (Meig.). Among them also a new species and one new genus have been described below.

Genus **Dallaiella** Mamaev, gen. n.

Type species: ***Dallaiella petrosa***, sp.n.

GENERIC DIAGNOSIS

Male. Antennae with 2+11 antennomeres, shorter than wings; scape short, cylindrical with few setae; pedicel as long as scape; flagellomeres with body 2.5 times as long as broad; stem as long or shorter than body; basal whorl with long setae in single row, shorter than stem; microtrichia on bodies of segments only, stems bare; circumfila ring-shaped on 1-8th flagellomeres; palpi with 1+4 palpomeres; eye bridge very narrow.

Wings long, narrow; costa extending beyond wing apex to fuse with R₅; R₁ runs nearly parallel with costa, curves up to fuse with costa in the proximal 2/5 of the wing length; R_s at narrow angle with R₅; Rm+M straight; M₃₊₄ absent; Cu simple, close to posterior wing margin, evanescent distally; anal lobe reduced; wings narrow gradually in basal part.

Legs 1.5 times as long as wing. Tibia of forelegs as long as femur, tibia of middle- and hind legs shorter than femur; 1st tarsomere with pointed projection; 2nd tarsomere longer than tibia; tarsal claws curved, simple; empodium as long a claw.

Ninth tergum of male genitalia with indistinct posterior margin; tegmen with a pair hooks; roots of gonocoxites well developed.

Female: unknown.

Dallaiella gen.n. is provisionally included in the tribe Porricondyliini, but very aberrant because male antennae only with 2+11 antennomeres, eye bridge strongly reduced, claws simple, empodium well developed, tegmen of male genitalia with peculiar sclerotized hooks.

***Dallaiella petrosa* Mamaev**, sp.n. (Fig 1, a,b)

Holotype: male, Italy, Siena, Monte Amiata, 13.07.1994 (B. Mamaev leg.), in Mamaev's collection.

Remark: *petra* - rock, stone (Latin).

Male. Antennae including scape and pedicel grey; thorax pale greyish with 3 dorsal brown streaks; margin of sternopleura and whole hypopleura brownish; abdomen pale orange, legs light. Length of wing 1.9 mm.

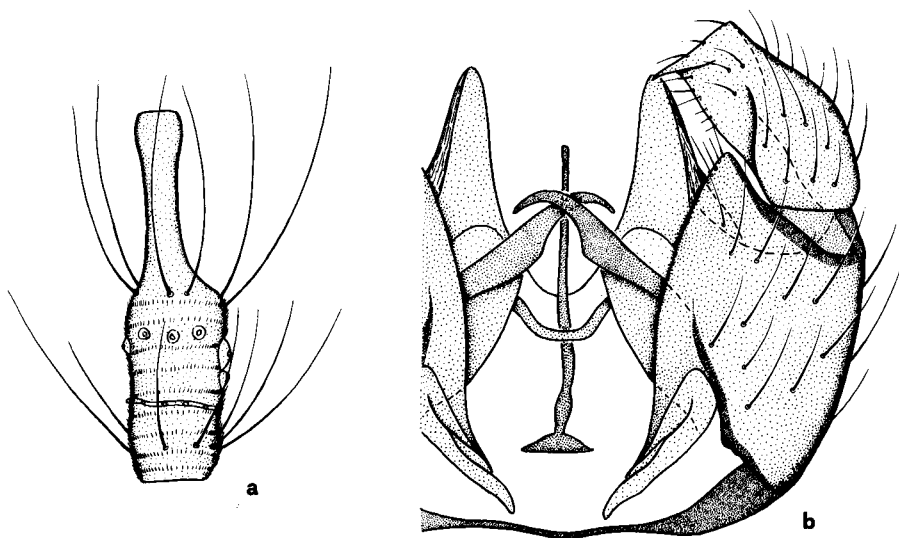


Fig. 1. *Dallaiella petrosa* sp.n., male. External morphology: a) 5th flagellar segment of antennae; b) male genitalia, dorsal aspect, 9th and 10th tergites removed.

Terminal part of eye bridge very narrow with one row of facets; palpi shorter than head, 4th palpomere as long as 3rd. Wing narrow, 2.5 times as long as broad with long stem; costa reaching wing margin beyond apex of wing.

Male genitalia with 9th tergum indistinct; 10th tergum with triangular emargination and pubescent lobes; roots of gonocoxites long, convergent; transversal bridge well sclerotized; hooks of tegmen heavily sclerotized, overlapping; gonocoxites long with acute terminal projection; genital rod thin, heavily sclerotized.

Biology: unknown.

ACKNOWLEDGEMENTS

The author is very grateful to collaborators of Department of Evolutionary Biology of Siena University. The new genus named in honour of the head of Department prof. R. Dallai, who investigated gall-midges under electron microscope. This research was financially supported by Siena University.

RIASSUNTO

UN NUOVO GENERE DI CECIDOMIIDI, *DALLAIELLA* MAMAEV, GEN. NOV. (DIPTERA, CECIDOMYIIDAE)

Viene descritto un nuovo genere di Cecidomyiidae della sottofamiglia Porricondylinae, con una specie nuova, *Dallaiella petrosa* sp. n. Detto genere si distingue per i seguenti caratteri morfologici del maschio (femmina sconosciuta): antenne 2+11 articolate, flagellomeri provvisti di filetti (circumfila) appressi, ponte oculare fortemente ridotto, ali strette, nervatura M_{3+4} assente, unghie tarsali semplici, empodio bene sviluppato, forcipe copulatorio provvisto di tegmen con uncini sovrapposti.

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