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The genus *Pseudexechia* Tuomikoski re-characterized, with a review of European species (Diptera: Mycetophilidae)

JOSTEIN KJÆRANDSEN
Museum of Zoology, Lund University, Helgonavägen 3, S-223 62 Lund, Sweden. E-mail: jostein.kjaerandsen@zool.lu.se.

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Abstract

The genus *Pseudexechia* Tuomikoski is re-characterized and described, including a thorough morphological study of the male and female terminalia, providing homology assessment of the various parts and substructures. The 25 currently known species of *Pseudexechia* are tentatively grouped into four species groups that are characterized mainly by structures of the male terminalia: the *canalicula* group (Holarctic), the *longistylus* group (Afrotropical) the *trisignata* group (Holarctic and Oriental), and the *trivittata* group (Holarctic and Oriental). The ten European species of *Pseudexechia* are then revised, of which one, *Pseudexechia tuomikoskii* **sp. n.**, is described as new to science. All males and nine associated females are keyed, measured, described and illustrated. A principal component analysis of 59 morphometric measurements failed to give a clear separation of the different species and species groups. Except for overall size and some diffuse differences in flagellomere and tarsus lengths the present study also failed to reveal morphometric characters that are clearly taxonomically informative, and species identity must rest primarily on structural differences in the terminalia with aid of coloration patterns. Given as ratios, however, some measurements, like the wing vein R_{4+5} bending index and the length to width ratio of clypeus, appear to be informative at species group level.

Key words: Exechiini, morphometrics, species groups, new species, revision

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