



***Psoquilla infuscata* Badonnel (Psocoptera: Psoquillidae) in the Western Hemisphere with description of the male and brachypterous form**

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Abstract

Psoquilla infuscata Badonnel, previously known from a single locality in coastal West Africa, is recorded from southern Mexico, Belize, Panamá, Suriname, and Perú. The original description is based entirely on macropterous females, while our material includes brachypterous forms of both sexes as well as macropterous specimens. Augmented descriptions of adults of this species and its only congener, *Psoquilla marginepunctata* Hagen are presented. The synonymy of *Heteropsocus dispar* Verrill with *P. marginepunctata* is confirmed. We attempt to homologize the skeletal parts of the complex phallosome of the Psoquillidae and the subfamily Perientominae in the closely related family Lepidopsocidae.

Key words: Psocoptera, Psoquillidae, *Psoquilla infuscata*, comparative morphology, Western Hemisphere records

Introduction

The genus *Psoquilla* Hagen contains only two described species, *Psoquilla marginepunctata* Hagen, the type, and *Psoquilla infuscata* Badonnel. The latter species was described from nine macropterous females collected at Le Banco, a forest area at Abidjan, coastal Ivory Coast, West Africa. No new information about this species has appeared since its original description (Badonnel, 1949). *Psoquilla marginepunctata* has a very wide distribution (cf. Lienhard and Smithers, 2002), having spread in human commerce. Recently, it has come to our attention that several lots of *Psoquilla* from tropical America differ consistently from *P. marginepunctata*. Closer examination reveals that they agree in the known diagnostic morphological and color characters with *P. infuscata* and so, beyond reasonable doubt, represent this species. We present records of *P. infuscata* for Mexico, Belize, Panamá, Perú, and Suriname.

The original description of *P. infuscata* was a differential diagnosis. It separated this species clearly from its congener, *P. marginepunctata*, but it did not include some important information, such as size and body color other than that of the wing. Here, we present a more detailed description, including the hitherto unknown male and the brachypterous form of both sexes. In order to permit detailed comparison with *P. marginepunctata*, we include an augmented description of that species as well. The complex psocquillid phallosome is analyzed and its parts are tentatively homologized with those of the perientomine lepidopsocids (cf. Mockford, 2005).

Material and methods

The material consists of 33 adult specimens of *P. infuscata* from the regions indicated above. Approximately 225 adult specimens of *P. marginepunctata* are on hand for comparison. One female of *P. infuscata* from each of the localities indicated above was dissected and slide-mounted. Two males of *P. infuscata* were also dissected and slide-mounted, as were two males of *P. marginepunctata*, thus permitting a detailed comparison