THE GENUS PTECTICUS LOEW FROM AUSTRALIA, NEW GUINEA AND THE BISMARCK AND SOLOMON ARCHIPFLAGOS

(DIPTERA: STRATIOMYIDAE)

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ABSTRACT

Fourteen species of the genus *Ptecticus* Loew are recognised and described or redescribed from Australia, New Guinea and the Solomon Islands and a key for their identification given. *P. albitarsus* de Meijere is established as a synonym of *P. quadrifasciatus*. *P. tritus* is proposed as a replacement name for *P. salomonensis* Lindner. The new species, *P. amplior* (from Australia and New Guinea), *P. queenslandicus* (Australia), *P. helvolus* (New Guinea), *P. spatuloides* (New Britain), *P. gilvus* (New Ireland) and *P. substitutus* and *P. eximius* (Solomons) are described. The male terminalia of thirteen species are illustrated.

Attention is drawn to the posttegula, a thoracic appendage medial to the base of each haltere. Its application as a character for the separation of the superfamilies Tabanoidea and Asiloidea is briefly discussed.

INTRODUCTION

This study of *Ptecticus* from New Guinea, Australia, the Bismarcks and the Solomons, is the outcome of the collection and subsequent efforts to identify over 30 specimens of the genus from Australia, where it was previously unrecorded (Nagatomi, 1975).

Previous authors, such as Lindner, van der Wulp, Bigot and de Meijere, have each recorded small numbers of specimens and species from various localities in New Guinea. With the generous loan of material housed in the Bishop Museum it bacame apparent that little was known regarding the distribution of the genus within the area and that several new species were represented in this material.

The last revision involving New Guinea species was by Brunetti (1923) who dealt with all species known to him from the "Oriental" region. The present study, based mostly on material housed in the Bishop Museum, places the number of species from the area at 14 of which 5 are described as new. It is scarcely likely that this represents the total number of species, especially from New Guinea, and more intensive collecting will undoubtedly result in the discovery of further species. Study of available types has revealed a number of misidentifications and some new synonymy has also been found, all of which is discussed below.

Whilst reviewing *Ptecticus*, it was found that a useful species grouping character was the presence of a tuft of either orange or black hairs, placed medially and basally to each haltere (Fig. 1). Further investigation showed the appendage from which these hairs arose, named the posttegula, has affinities with the squama or tegula of the wing and in fact is possibly the remnant of one of these lobes of the hindwing or haltere.

The subfamilies of Stratiomyidae examined have the posttegula well developed and haired, Lophatellinae and Pachygasterinae being exceptions in having a predominance of genera with the posttegula bare, or rarely, sparsely haired.

Records of The Australian Museum, 1979, Vol. 32 No. 18, 563-588, Figures 1-47