

A new *Leioproctus* with unique wing venation in males (Hymenoptera: Colletidae: Paracolletinae) with comments on unusual wing modifications in bees

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ABSTRACT

Leioproctus idiotropoptera Packer, new species, is described on the basis of one male and two females from the Northern Territory, Australia. The male has modifications of the venation and setation of the forewing that are unparalleled among the bees and also possesses highly modified mandibles and fore- and midlegs. The new species does not fall easily into any of the presently named subgenera of *Leioproctus*, but, given the great need for revision of this group, an additional subgeneric name is not presented at this time. Some comments on unusual wing modifications in bees are made.

Key words:

INTRODUCTION

The colletid genus *Leioproctus* is diverse, speciose, and found primarily in Australasia and temperate regions of South America (Michener, 2000). Although it is divided into numerous subgenera, its systematics badly needs clarification. It seems highly probable that a global revisionary study will result in some subgenera being raised to generic status (as has already been suggested for some Australian groups by Maynard (1992, 1996)) and the sinking of others. This is especially true for the South American species and also the Australian ones with two submarginal cells: Australian species with three submarginal cells have been studied in detail by Maynard (1992).

The purpose of this paper is to describe a new species of *Leioproctus*, remarkable in the male for the secondary sexual modifications of the mandibles, legs, and especially the forewings.