



New and little known predatory katydids from Mascarene islands (Ensifera: Meconematinae and Hexacentrinae)

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Abstract

The predatory katydids of Mauritius, Rodrigues, and Réunion islands are examined. One new Hexacentrinae genus and species, and three new Phisidini species (Meconematinae) are described from Mauritius: *Nepheliphila raptor* **n. g. n. sp.**, *Brachyphysis nattecantor* **n. sp.**, *Paradecolya expectata* **n. sp.** and *Paradecolya briseferi* **n. sp.** The only Phisidini from Rodrigues *Brachyphysis spinifera* (Butler, 1876) is transferred to *Rodriguesiophysis* **n. gen., n. comb.** and the male is described for the first time. Descriptions of the two Phisidini from La Réunion *Brachyphysis viettei* Chopard, 1957 and *Paradecolya inexpectata* (Chopard, 1957) are given. The male of *B. viettei* is described for the first time. The song of all these species but *P. briseferi* **n. sp.** is described for the first time. In addition to these endemic species, the widespread *Xiphidiopsis lita* Hebard, 1922 occurs on all three Mascarene islands.

Key words: Orthoptera, Listroscelidinae, Phisidini, Meconematinae, Reunion, Mauritius, endemism

Introduction

Recent field studies on South Western Indian Ocean (SWIO) islands have provided records of ~110 Orthoptera species on the Mascarene archipelago (Mauritius, Rodrigues and Réunion). Most of the endemic species are yet to be described (Hugel, in prep). In the present article, the predatory katydid fauna of the Mascarene archipelago is examined. Species from Comoros and Seychelles will be subsequently examined in a second article.

Eight predatory katydids belonging to various clades (Meconematinae, Hexacentrinae) occur on the archipelago. The Meconematini *Xiphidiopsis lita* Hebard, 1922, widespread on Pacific islands, occurs on all three Mascarene islands and on islets surrounding Mauritius (Hugel, 2010 in press.). The hexacentrine genus *Nepheliphila* **n. gen.** is proposed for a new species endemic to Mauritius: *Nepheliphila raptor* **n. g. n. sp.**, which represents the first record of Hexacentrinae on a SWIO island. *Brachyphysis* Chopard, 1957 is redefined; *B. viettei* Chopard, 1957 is redescribed, the male is described for the first time; *B. nattecantor* **n. sp.** is described from Mauritius; adults of both species are restricted to various endemic Sapotaceae. *Paradecolya* Jin, 1992 is redefined; *P. inexpectata* (Chopard, 1957) is redescribed and two species are described from Mauritius *P. expectata* **n. sp.** and *P. briseferi* **n. sp.**. The only Phisidini species from Rodrigues, *Paradecolya spinifera* (Butler, 1876), is transferred to the new genus *Rodriguesiophysis* **n. g., n. comb.** and the male is described for the first time.

The biology of all these species is documented and the song of all but *P. briseferi* **n. sp.** is described. The conservation status of *Nepheliphila* **n. g.**, *Brachyphysis*, *Paradecolya* and *Rodriguesiophysis* **n. g.** is discussed, as some of them should be considered as endangered.

The puzzling affinities of SWIO Phisidini and Hexacentrinae with the Oriental species will be discussed elsewhere (Warren, Hugel & Strasberg, in prep.).