



Brief Summary of Holochlorini (Orthoptera: Tettigoniidae: Phaneropterinae), with Description of Seven New Species from China

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Abstract

Inclusion of the tribe Holochlorini has been questionable, for its complicated history and its controversial important diagnostic character about structure of tibial tympana. Here we briefly introduce its history and summarize its inclusion in the world and in China. We also introduce a newly recorded genus from China, *Arnobia*, and other two genera in the tribe, *Psyra* and *Phaulula*, provide a list of Chinese species for the three genera, separately, together with the key to species of the three genera. At the same time, we describe seven new species to science in the Holochlorini, i.e., *Arnobia hainanensis* sp. nov., *Arnobia guangxiensis* sp. nov., *Phaulula apicalis* sp. nov., *Psyra magna* sp. nov., *Psyra heptagona* sp. nov., *Parapsyra brevicauda* sp. nov., and *Sinochlora semicircula* sp. nov. Diagnostic illustrations are presented.

Key words: katydids, Holochlorini, Orthoptera, new species, China

Introduction

Bei-Bienko (1954) combined Brunner von Wattenwyl's (1878) *Psyrae* and *Holochlorae* as the tribe Holochlorini and provided detailed description and diagnostic characters of the tribe. At present, inclusion of the tribe Holochlorini needs to be carefully checked out. On one hand, the history of the two groups *Psyrae* and *Holochlorae* is very complicated after they were established. On the other hand, the diagnostic character that asymmetric tympana on the fore tibiae is exposed in the exterior side and conchate in the interior side needs to be in careful consideration, as many authors (Ragge 1980, Gorochov & Kang 2002) stated that the structure of tympana is maybe plesiomorphy.

Initially, Brunner von Wattenwyl (1878) stated two groups of genera named *Psyrae* and *Holochlorae*, which are characterized by the strong, acute fore coxal spine and by the asymmetric tympana on the fore tibiae, and included 11 genera, i.e., *Ancylecha* Serville, *Phygela* Stål, *Arnobia* Stål, *Tapeina* Brunner von Wattenwyl (synonymized as *Tapiena* Bolívar), *Casigneta* Brunner von Wattenwyl, *Elbenia* Stål, *Phaula* Brunner von Wattenwyl (synonymized as *Phaulula* Bolívar), *Psyra* Stål (synonymized as *Psyra* Uvarov), *Holochlora* Stål, *Liotrachelia* Brunner von Wattenwyl, and *Sympaestria* Brunner von Wattenwyl. Subsequently, Brunner von Wattenwyl (1891) added 7 genera, i.e., African *Weissenbornia* Karsch, Asian *Pyrgophylax* Brunner von Wattenwyl, *Dapanera* Karsch, *Gonatoxia* Karsch, *Habra* Brunner von Wattenwyl, *Calopsyra* Brunner von Wattenwyl, and *Plangiopsis* Karsch, in the two groups. Dohrn (1892) considered that the genus *Pyrgophylax* (which was considered as the synonym of *Molpa* Walker) should be removed from the two groups and put into the genus group *Ephippithytæ* Brunner von Wattenwyl (1878). Kirby (1906) didn't follow Dohrn (1892) in the respect, and added Dohrn's 2 genera, *Dicranopsyra* Dohrn, and *Poecilopsyra* Dohrn in the two groups in his excellent list. Afterwards, Karny (1925a) treated all of these related genera as a big group "*Ancylecha-Holochlora*-group". He considered that the 3 genera, *Habra*, *Sympaestria*, and *Molpa* should be eliminated from the *Ancylecha-Holochlora*-group, and put into the genus group, *Dysmorphae* Brunner von Wattenwyl (1878). He also thought other 5 genera *Parapsyra* Carl, *Furnia* Stål, *Pseudopsyra* Hebard, *Stictophaula* Hebard, and *Poecilopsyra* should be added in the *Ancylecha-Holochlora*-group, among which *Furnia* was previously considered to belong to the genus group *Anaolocomeræ* Brunner von Wattenwyl (1878).