



***Toxoptera* Koch (Hemiptera: Aphididae), a generic account, description of a new species from China, and keys to species**

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Abstract

The aphid genus *Toxoptera* Koch is reviewed. *Toxoptera chaetosiphon* sp. nov. is described from *Camellia oleifera* in Guangxi, China. Keys to known species of *Toxoptera* in China are provided. The type specimens studied are deposited in the Zoological Museum, Institute of Zoology, the Chinese Academy of Sciences, Beijing, China and the Natural History Museum, London, UK.

Key words: *Toxoptera*, Hemiptera, Aphididae, new species, key, China

Introduction

Koch (1856) proposed his new aphid genus *Toxoptera* to accommodate his new species, *T. aurantiae*, which became the type-species by monotypy; this has long been regarded as synonymous with *Aphis aurantii* Boyer de Fonscolombe, 1841. Baker (1920) defined this *Aphis*-like genus as having fore wing with media once-branched, but even in the genotype the media is sometimes twice branched on one or both sides. According to Williams's description in 1921, *T. aurantii* has a special sound production (stridulatory) apparatus, which consist of spines on the hind tibia and ventro-lateral spinulose ridges on the posterior abdominal segments, besides the once-branched media of the fore wing. Bröner (1930) regarded the once-branched media of the fore wings as an important character and erected a new genus *Schizaphis* to include the well-known and cosmopolitan species, the greenbug *Toxoptera graminum* Rondani and other species with similar biology. Since then *Toxoptera* has been distinguished from *Schizaphis* and other allied genera by the presence of the stridulatory apparatus in *Toxoptera*.

Eastop (1952) placed *Aphis citricidus* Kirkaldy and *Aphis odinae* van der Goot into this genus based on the presence of stridulatory apparatus. Shinji (1941) placed five species in the genus, *T. acori* Shinji, *T. agrimoniae* Shinji, *T. celtis* Shinji, *T. piricola* (Matsumura) and *T. scirpi* (Passerini). Among them, *T. acori* Shinji, *T. piricola* (Matsumura) and *T. scirpi* (Passerini) were moved to the genus *Schizaphis* by Eastop and Hille Ris Lambers (1976). Tao (1961) described *T. schlingeri*, but Raychaudhuri (1980) and Remaudière and Remaudière (1997) considered the species as a synonym of *T. aurantii*: Martin (1989) questioned this and thought that further studies may reconfirm it as a valid species. Martin (1991) described *T. victoriae* from Rutaceae in Hong Kong, China. Until now, the genus was therefore represented by five species in the world (Remaudière and Remaudière, 1997)—*T. aurantii* (Boyer de Fonscolombe), *T. celtis* (Shinji), *T. citricidus* (Kirkaldy), *T. odinae* (van der Goot), and *T. victoriae* Martin. Host plants so far recorded for species of *Toxoptera* are very numerous, and in many families, but mainly woody dicotyledons.