



A new species of *Chlorophorus* Chevrolat (Coleoptera: Cerambycidae: Cerambycinae) from China with description of biology

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Abstract

The morphological and biological characteristics of the new species, *Chlorophorus caragana* sp. nov. from China, are described. This new species is a serious pest of *Caragana korshinskii* Kom. in Ningxia Hui Autonomous Region, China. A key to the *Chlorophorus* species that occur in northern China is presented. The type specimens are deposited in the Entomological Museum of Yangtze University.

Key words: *Chlorophorus*, new species, biological characteristic, China

Introduction

Since the establishment of the genus *Chlorophorus* (Coleoptera: Cerambycidae: Cerambycinae) by Chevrolat in 1863, more than two hundred species in this genus have been described worldwide. Currently, 72 species (and subspecies) are recorded in China, of which 17 species (and subspecies) occur in northern China (Hua *et al.* 2009).

In 2008, we found a *Chlorophorus* species that made serious damage to *Caragana korshinskii* Kom. in Ningxia Hui Autonomous Region, China. Its larvae bore into the stems of *C. korshinskii*, hollowing the stems. Damaged trees can wither and die. In heavily-damaged areas, wind-broken *C. korshinskii* trees are commonplace. *C. korshinskii* is one of the most important plants for vegetation restoration, ecological reconstruction and regional economic development in the arid and semi-arid areas of China.

After careful examination, we found that this was an undescribed *Chlorophorus* species that differs from *C. obliteratus* (Ganglbauer, 1889) by the distinctive morphology of its pronotum. Here, we describe the new species and its biology and provide a key to *Chlorophorus* species that occur in northern China.

Material and methods

Materials were deposited in following institutions as shown in text: Entomological Museum of Yangtze University, Insect Collection of Beijing Forestry University and Insect Collection of Forest Pest Control and Quarantine Station of Ningxia.

The male genitalia were prepared by soaking the whole beetle in boiling water solution of 10% KOH for 10 min, and then removing the genitalia with forceps and clearing them in water at room temperature. Adult pictures were taken by a Canon 450D digital camera. The pictures of genitalia were made under a dissecting microscope (Olympus SZX12).

From April 2007 to October 2009, *C. korshinskii* samples heavily infested by the insect were collected from a forest planted in the fixed sand dunes of Shapotou, Zhongwei city in Ningxia. Samples were divided into two