Neohydatothrips (Thysanoptera: Thripidae) from China: new species and records, with a key to species

MAJID MIRAB-BALOU, XIAO-LI TONG¹ & SHU-LAN YANG

Department of Entomology, College of Natural Resources and Environment, South China Agricultural University, Guangzhou 510642, China

¹Corresponding author, E-mail: xtong@scau.edu.cn

Abstract

Three new species of Neohydatothrips (Thripidae: Sericothripinae) are described and illustrated from China: *N. concavus* sp. n., *N. flavicingulus* sp. n. and *N. luteolipes* sp. n.; and two species previously recorded from Taiwan are here reported for mainland China for the first time: *N. plynopygus* (Karny) and *N. tabulifer* (Priesner). A key to the 16 Neohydatothrips species recorded from China (including Taiwan) is provided.

Key words: Sericothripinae, Neohydatothrips, pest, larva, China

Introduction

The genus Neohydatothrips is the largest of the three genera in the Thysanoptera, Thripidae subfamily Sericothripinae, with about 100 described species (ThripsWiki 2013). Species of this genus are very similar in appearance to those of Hydatothrips, and these two genera differ only in the structure of the metasternum. This is connected in the middle by a T-shaped or Y-shaped apodeme in Neohydatothrips (Figs 2, 16), but forms two arms with a median V-shaped apodeme in Hydatothrips (Wang 2007).

*Neohydatothrips* species are all phytophagous, feeding and breeding on leaves or flowers, but few are reported as pests. *N. samayunkur* causes damage on marigolds, *Tagetes* spp. (Asteraceae), and is widely distributed in Asia, the Americas, and Australia (Nakahara 1999). *N. burungae* is recorded from avocado in California and Central America, and as causing distortion to young leaves of *Passiflora* in Colombia (Hoddle et al. 2012). *N. gracilicornis* is reported as damaging Pinaceae and Betulaceae in Spain and South Italy (Marullo 2009). *N. magnoliae* was described from Yunnan Province feeding on *Parakmeria yunnanensis* leaves (Magnoliaceae) (Zhang et al. 2012), and *N. flavicingulus* sp. n. is described below as damaging leaves of *Manglietia fordiana* in southern China. Zhang et al. (2012) provided an identification key to 13 species from China, and Wang (2007) a key to 16 species from East and South Asia. In the present paper, three new species are described from China: two from old specimens deposited in SCAU, but one collected recently from *Manglietia fordiana* (Magnoliaceae). A revised key is provided to the 16 species of Neohydatothrips now recorded from China.

Materials and methods

Examined specimens were mounted with Canada balsam. Figures 12–15 were made using a scanning electron microscopy, under XL-30-ESEM operated at 20 kV, in South China Agricultural University; and the other figures were made using a camera lucida. Type specimens are deposited in the Insect Collection of Department of Entomology, South China Agricultural University (SCAU). This study was based mainly on specimens from the following collections: the Insect Collection of Department of Entomology, South China Agricultural University...