SHORT COMMUNICATION

M. Mirab-balou, X. L. Tong*. FIRST RECORD OF *FRANKLINOTHRIPS VESPIFORMIS* (CRAWFORD, 1909) (THYSANOPTERA: AEOLOTHRIPIDAE) FROM MAINLAND CHINA. – Far Eastern Entomologist. 2012. N 249: 5-7.

Summary. Franklinothrips vespiformis (Crawford, 1909) is recorded from mainland China for the first time. The detailed morphology of this predatory thrips is given and illustrated. A key to Chinese species of Franklinothrips is provided.

Key words: Thysanoptera, *Franklinothrips*, predator, new record, China.

М. Мираб-балу, Ц. Л. Тонг. Первое указание трипса Franklinothrips vespiformis (Crawford 1909) (Thysanoptera: Aeolothripidae) из континентального Китая // Лальневосточный энтомолог. 2012. N 249. C. 5-7.

Резюме. Впервые для фауны континентального Китая отмечен *Franklinothrips vespi-formis* (Crawford, 1909). Составлено иллюстрированное морфологическое описание этого хищного трипса. Приведена определительная таблица китайских видов рода *Franklinothrips*.

INTRODUCTION

The *Franklinothrips* Back (Terebrantia: Aeolothripidae) with 16 species in the world (Mound, 2012) are predators and ant-mimics (Mound & Marullo, 1996). Species of this genus are easily identified by their broad forewings usually banded or shaded, exceptionally long and slender III-IV antennal segments more or less constricted abdominal segments and by I & II. Females are fast-running and easily misidentified with ants or bethylid wasps due to their ant mimicry behavior and are obligate predators on other small arthropods including thrips, mites. Some members are marketed as useful biological control agents against pest thrips (Loomans & Vierbergen, 1999). Mound and Reynaud (2005) redefined the genus *Franklinothrips* and included 14 species worldwide. Subsequently, Veer (2010) described a new species from India; and recently, Mirab-balou et al. (2011a) described *F. tani* from Yunnan Province of China.

In China three species of *Franklinothrips* have been reported: *F. megalops* Trybom, *F. suzuki* Okajima and *F. tani* Mirab-balou et Chen (Mirab-balou et al. 2011b). Herein, *F. vespiformis* that was collected from Guangdong Province, is newly recorded for mainland China. Examined specimens were mounted with Canada balsam. The specimens are deposited in the Insect Collection of Department of Entomology, South China Agricultural University.

ORDER THYSANOPTERA

Family Aeolothripidae

Key to Chinese Franklinothrips species

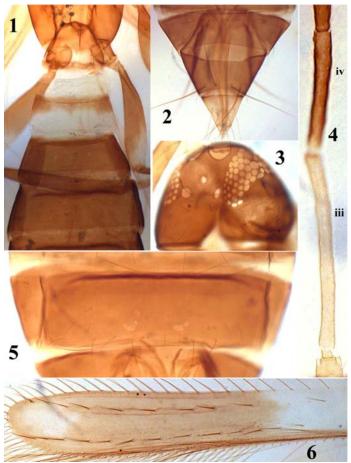
1. Forewing with a transverse median brown area and the posterior marg	gin extensively brown;
antennal segments III & IV yellowish brown. (Yunnan)	F. tani
- Forewing transversely banded	
2. Abdominal segment X dark, as dark as or darker than preceding seg	
	• • •
- Abdominal segment X paler than preceding segments	3
3. Abdominal tergites II–IV yellow. (Hubei, Taiwan)	
- Abdominal tergites II-III vellow (Fig. 1). (Taiwan, Guangdong)	

Franklinothrips vespiformis (Crawford, 1909)

Figs 1-6

Aeolothrips vespiformis Crawford 1909: 109.

MATERIAL EXAMINED. **China**: The experimental farm (23°10'04"N, 113°21'46"E) at South China Agricultural University, 49, Guangzhou, Guangdong Province, from eggplant, *Solanum melongena* L. (Solanaceae), 28.XI 2004, Coll. Wang Jun.



Figs. 1-6. Franklinothrips vespiformis. 1 – abdominal tergites I–V; 2 – abdominal tergites VIII–X; 3 – head; 4 – antennal segments III & IV; 5 – abdominal sternite VII; 6 – forewing.

DIAGNOSIS. Macropterous female: body dark brown; abdominal segments II–III and X yellow (Figs. 1, 2); antennal segments I–III yellow (Fig. 4), the rest brown; legs brown except femora with yellow marking; forewing with small subapical pale area, although this is sometimes indistinct (Fig. 6). Head broader, completely recessed into pronotum, prolonged in front of eyes (Fig. 3); eyes large, extending far under onto ventral side of head, coarsely facetted, not pilose. Ocelli present, large, posterior ocelli bigger than fore ocellus; with 4–6

pairs of postocular setae. Antennae 9-segmented; segment III longest, with sensorium on IV extending full length of segment. Maxillary palpi 3-segmented. Pronotum longer and broader than head, smooth; mesonotum smooth anterior of median setae, with striation behind median setae, median pair of setae situated in middle of sclrite; mesosternum entirely divided by furcal spinula; metanotal median setae situated near anterior margin. Forewing broad (Fig. 6); anterior and posterior vein setae well-developed, cilia straight; clavus with 6 marginal setae; hind wing posterior margin darker than anterior. Abdomen narrowly attached to thorax; tergites with median setae small and wide apart; tergal median setae situated anterior to campaniform sensilla; tergite IX with two pairs of long setae posterior to campaniform sensilla. Abdominal sternites III–VII with two pairs of marginal setae and two pairs of discal setae laterally; sternite VII with two pairs of small discal setae sub-medially (Fig. 5). Ovipositor well-developed.

DISTRIBUTION. China (Guangdong Province, Taiwan); Central America, USA, Puerto Rico, Bermuda, Cuba, Jamaica, Dominican Republic, Trinidad, Mexico, Nicaragua, Honduras, Costa Rica, Panama, Colombia, Surinam, Venezuela, El Salvador, Brazil, Fiji, Japan, Thailand, New Caledonia, Australia (Queensland).

NOTES. This species was identified based on the original description and characters stated in Mound and Reynaud (2005).

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REFERENCES

- Crawford, D.L. 1909. On some Thysanoptera from Mexico and the south. *Pomona College Journal of Entomology*, 1: 109–119.
- Loomans, A.J.M. & Vierbergen, G. 1999. *Franklinothrips*: perspectives for greenhouse pest control. *Bulletin IOBC/WPRS*, 22(1): 157–190.
- Mirab-balou, M., Shi, M. & Chen, X X. 2011a. A new species of *Franklinothrips* Back (Thysanoptera: Aeolothripidae) from Yunnan, China. *Zootaxa*, 2926: 61–64.
- Mirab-balou, M., Tong, X.L., Feng, J.N. & Chen, X.X. 2011b. Thrips (Insecta: Thysanoptera) of China. *Check List (Journal of Species Lists and Distribution)*, 7(6): 720–744.
- Mound, L.A. & Marullo, R. 1996. *The Thrips of Central and South America: An Introduction*. Memoirs on Entomology, International, 6: 1–488.
- Mound, L.A. & Reynaud P. 2005. *Franklinothrips*; a pantropical Thysanoptera genus of ant-mimicking obligate predators (Aeolothripidae). *Zootaxa*, 864: 1–16.
- Mound, L.A. 2012. Thysanoptera (Thrips) of the World-a checklist. http://www.ento.csiro.au/thysanoptera/worldthrips.html (accessed 14.6.2012)
- Veer, V. 2010. A new species of Franklinothrips (Thysanoptera: Terebrantia: Aeolothripidae) from Uttarakhand, India. Annals of Entomology, 28(2): 7–9.

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