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(Hemiptera: Psylloidea), with One Species New
to The Japanese Fauna

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<https://doi.org/10.5109/6610219>

出版情報 : ESAKIA. 55, pp.28-30, 2022-12-31. 九州大学大学院農学研究院昆虫学教室
バージョン :
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New records of Three Gall-Forming Psyllids from Tanegashima Is., Kagoshima Prefecture (Hemiptera: Psylloidea), with One Species New to The Japanese Fauna

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Abstract. Three gall-forming psyllids are newly recorded from Tanegashima Is., Kagoshima Prefecture, S. Japan, with one of which is new to the Japanese fauna.

Key words: *Caesalpinia*, *Cryptocarya*, *Euphalerus hiurai*, subtropical forest, *Syzygium*, *Trioza exoterica*, *Trioza pentaspina*.

Introduction

Any species of psyllids has not been known from Tanegashima Is., Kagoshima Prefecture, so far. Three species, *Euphalerus hiurai* Miyatake, *Trioza pentaspina* Matsumoto, and *Trioza exoterica* Yang are newly added to the fauna of Tanegashima Is. *Trioza exoterica* is also new addition to the Japanese fauna. All of them are gall formers and producing different types of gall on the host plant.

Examined specimens are preserved in the collections of the Osaka Museum of Natural History (OMNH) and National Agriculture and Food Research Organization (NARO) separately.

Before going further, our appreciation due to Mr. Koichi Kaburagi for providing material, and Dr. Hiromitsu Inoue of the National Agriculture and Food Research Organization for various informations.

Family Psyllidae

Euphalerus hiurai Miyatake, 1973

[Japanese name: Jaketsuibara-kijirami]

(Fig. 1)

Specimens examined: Many galls, Ohno-rindo, Anjo, Nishino-omote, 12.viii.2008, K. Kaburagi leg., on *Caesalpinia decapetala*. Many galls, Anjo, Nishino-omote, 9.ix.2008, K. Ogata leg., on *C. decapetala*; 11♂8♀, same locality, emerged from galls, 15.ix–22.x, 2008

(OMNH).

Adult: Overall length from anterior margin of head to tip of folded wings 2.8–3.5mm. Forewing subrhomboidal, with conspicuous maculation of dark brown or black.

Nymph: Psylline type, 5th instar crawling out from galls for emergence.

Distribution: Japan (Honshu, Tanegashima Is.).

Host plant: “Jaketsu-ibara” – *Caesalpinia decapetala* (Roth) Alston [Fabaceae]

Galls: Fold type, well swollen, 6–8 mm in length. Each gall usually keeps 1 or 2 nymphs inside, and sometimes more.

Biology: Univoltine, hibernating takes place in the stage of egg on the surface of trunk (Miyatake 1973). Adult emerges in September.

Family Triozidae

Trioza pentaspina Matsumoto, 1995

[Japanese name: Kebuka-togari-kijirami]

(Figs 2–3)

Specimens examined: Many galls, Sakai-Yasuodani, Nakatane-cho, 30.vi.2007, K. Kaburagi leg., on *Syzygium jambos*; 4♂3♀ (OMNH), 2♂2♀ (NARO). emerged from galls 1-6.vii.2007. 5♂8♀ (NARO), Tanegashima Is., Kagoshima Pref., vi. 1999, K. Ogata leg., on *S. jambos*.



FIGURE 1. *Euphalerus hiurai* Miyatake. 1, female; 2, galls.

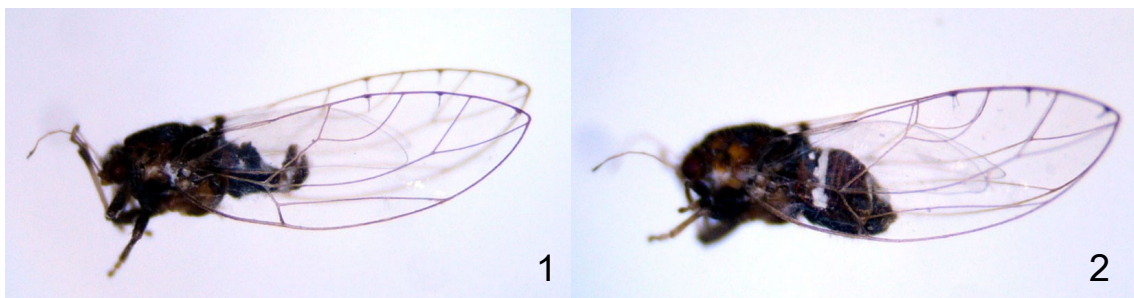


FIGURE 2. *Trioza pentaspina* Matsumoto. 1, male; 2, female.



FIGURE 3. *Trioza pentaspina* Matsumoto. 1, 4th and 5th instar nymphs; 2, galls.

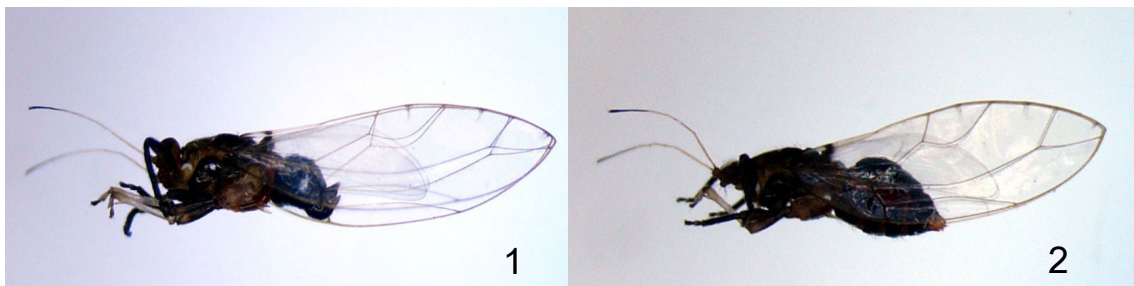


FIGURE 4. *Trioza exoterica* Yang. 1, male; 2, female.



FIGURE 5. *Trioza exoterica* Yang. 1, 5th instar nymph; 2, galls.

Adult: Overall length from anterior margin of head to tip of folded wings 3.8–3.9 mm. Body color dark brown to black, abdomen with conspicuous white wax band basally.

Nymph (5th instar): Triozine type, oval, yellowish, about 2 mm in length, body margin covered with short wax threads.

Distribution: Japan (Tanegashima Is., Yakushima Is., Amamioshima Is., Okinoerabu Is., Okinawa Is., Kumejima Is., Iriomote Is.). Distribution is updated based on the recent information including unpublished data.

Host plant: “Futomomo” –*Syzygium jambos* (L.) Alston [Myrtaceae]

Galls: Pit fall type, infested leaf sometimes fat and twisted.

Trioza exoterica Yang, 1984

[Japanese name: Shinakusumodoki-togari-kijirami]
(Figs 4–5)

Specimens examined: Many galls, Yamano-oda, Sakai, Nakatane-cho, 22.v.2008, K. Kaburagi leg., on *Cryptocarya chinensis*; 9♂5♀ (OMNH), 2♂2♀ (NARO), same locality, emerged from galls, 25.v. –1.vi.2008.

Adult: Body glossy black. Overall length from anterior margin of head to tip of folded wings 3.8–3.9 mm. Forewing quite long, nearly two

times as long as body.

Nymph (5th instar): 2.1–2.3 mm in length, triozone type, elongate oval, about 2 times as long as wide, yellowish white with conspicuous red eyes, body margin covered with long white wax threads densely.

Distribution: Japan (Tanegashima Is.); Taiwan

Host plant: “Shinakusumodoki” – *Cryptocarya chinensis* (Hance) Hemsl. [Lauraceae]

Galls: Leaf margin roll type, with many nymphs inside, 5th instar nymph crawling out for emergence.

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