

Checklist of Lizard Beetles (Coleoptera, Erotylidae, Languriinae) of Islands of Tsushima and Iki-no-shima, Japan

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Abstract The languriine fauna of two islands, Tsushima and Iki-no-shima, of Japan are listed with biological short notes for each species. The faunas of both islands are compared with that of Kyushu. *Languriomorpha lewisii* (CROTCH, 1873) and *Anadastus praeustus* (CROTCH, 1873) are newly recorded from Tsushima. The latter is also newly recorded from Iki-no-shima.

Introduction

Tsushima and Iki-no-shima are islands located in the Korea/Tsushima Strait, between Kyushu and South Korea. Although, the fauna of Languriinae (Coleoptera, Erotylidae) from Kyushu has been well researched and eleven species are recorded from there (*e.g.* SASAJI, 1985), the faunas of those islands have been poorly known so far. Only three species, *Anadastus matsuzawai* M. CHÛJÔ, 1955, *Microalanguria jansonii jansonii* (CROTCH, 1873) and *Tetraphala fryi* (FOWLER, 1886), from Tsushima (VILLIERS, 1945; M-T. CHÛJÔ, 1961; SASAJI, 1976), and no species from Iki-no-shima have been recorded.

In 2014, however, we had an entomological survey on those islands and collected five languriine species including new to the islands. Herein, we listed all species collected from the islands and compare the faunas with that of Kyushu.

Materials and Methods

The specimens used in this paper are deposited in the Ehime University Museum, Japan (EUMJ) as well as the private collection of the first author. Our names in collecting data are abbreviated as follows: SM: Susumu MATSUO, YH: Yusuke HARA.

The distributional ranges of each species follow mainly SASAJI (1985). For further distributional records, the corresponded literatures are cited respectively.

Checklist of the Subfamily Languriinae from Tsushima and Iki-no-shima

Languriini

1. *Anadastus matsuzawai* M. CHÛJÔ, 1955

[Japanese name: Kuro-hime-kometsukimodoki]

(Fig. 2A)

Specimens examined. [Tsushima] 1 ♂, Izuhara-machi, 25.VIII.1966, S. NOMOTO leg. (EUMJ);

Table. Comparison of the languriine faunas among Kyushu, Tsushima and Iki-no-shima.

Species name	Kyushu	Tsushima	Ikinoshima
<i>Anadastus atriceps</i> (CROTCH)	○		
<i>Anadastus filiformis</i> (FABRICIUS)	○		
<i>Anadastus harmandi</i> VILLIERS	○		
<i>Anadastus matsuzawai</i> M. CHŪJŌ	○	○	
<i>Anadastus menetriesii</i> (MOTSCHULSKY)	○		
<i>Anadastus praeustus</i> (CROTCH)	○	○	○
<i>Anadastus ruficeps</i> (CROTCH)	○		
<i>Doubledaya bucculenta</i> LEWIS	○		
<i>Languriomorpha lewisii</i> (CROTCH)	○	○	
<i>Languriomorpha nigritarsis</i> (WATERHOUSE)	○		
<i>Microianguria jansoni jansoni</i> (CROTCH)	○	○	
<i>Tetrphala fryi</i> (FOWLER)	○	○	
Total number of species	11	5	1

1 ♂, Ariake-yama (Mt.), Izuhara-machi, 25–28.VII.1979, Y. SEIYAMA leg. (EUMJ).

Distribution. Japan: Shikoku, Kyushu, Tsushima; Taiwan.

Note. The biology of this species is unknown and only a few collecting records are known so far (e.g. M-T. CHŪJŌ, 1961). No specimens were collected in our field survey.

2. *Anadstus praeustus* (CROTCH, 1873)

[Japanese name: Tsumaguro-hime-kometsukimodoki]

(Figs. 2B, 3A)

Specimens examined. [Tsushima] 1 ex., Tonosaki, Nishidomari, Kamitsushima-machi, 34°39'54"N, 129°29'22"E, 20 m alt., 6.VIII.2014, YH; 1 ex., Ayou-dake (Mt.), Mawari, Toyotama-machi, 34°21'34"N, 129°14'41"E, 11 m alt., 7.VIII.2014, YH; 1 ex., Kôtsuki, Izuhara-machi, 34°11'30"N, 129°12'48"E, 156 m alt., 5.VIII.2014, YH; 2 exs., Ariake-yama (Mt.), Izuhara-machi, 34°12'15"N, 129°15'54"E, 558 m alt., 7.IX.2014, SM; 2 exs., Kotorige-yama (Mt.), Kashine, Izuhara-machi, 34°10'24"N, 129°14'48"E, 447 m alt., 5.VIII.2014, YH; 5 exs., Zaike-yama (Mt.), Oura, Izuhara-machi, 34°9'37"N, 129°16'11"E, 256 m alt., 5.VIII.2014, YH.

[Iki-no-shima] 1 ex., Wataraura, Gônoura-chō, 33°45'1"N, 129°39'44"E, 21 m alt., 4.VIII.2014, YH.

Distribution. Japan: Honshu, Is. Sado-ga-shima, Kyushu, Tsushima (new record), Iki-no-shima (new record); China; Indochina.

Note. *Miscanthus sinensis* (THUNB.) ANDERSSON of the family Poaceae has been reported as the adult feeding plant of this species (KUROSAWA, 1968). All specimens in the present study were collected from this plant by beating.

These are the first records of the species from Tsushima and of the subfamily Languriinae from Iki-no-shima.

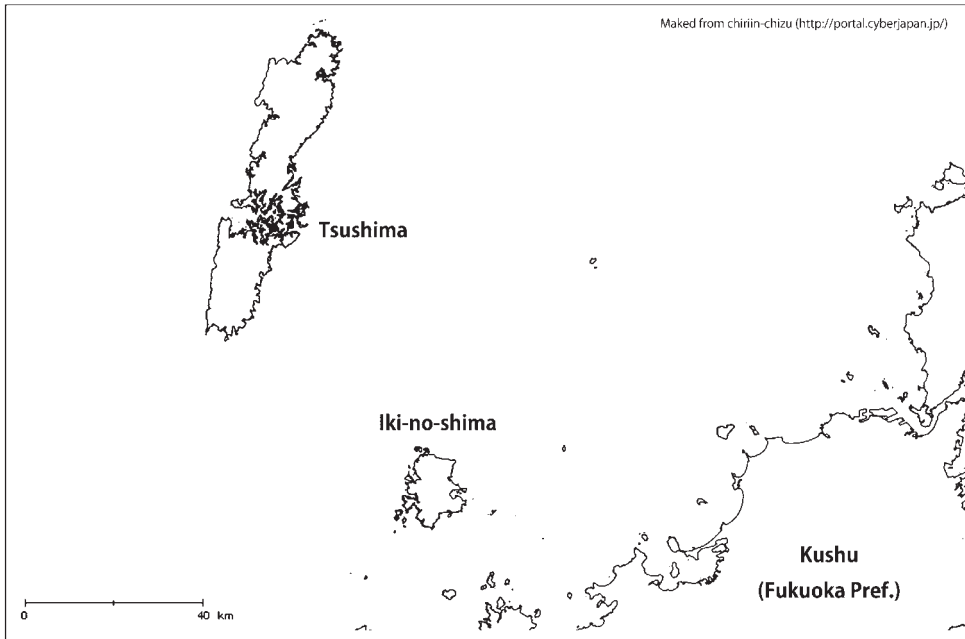


Fig. 1. Map of Tsushima and Iki-no-shima.

3. *Languriomorpha lewisii* (CROTCH, 1873)

[Japanese name: Ruisu-kometsukimodoki]

(Figs. 2C, 3B)

Specimens examined. [Tsushima] 3 exs., Shiratake (Mt.), Mitsushima-machi, 3.V.2014, S. SEJIMA leg.; 2 exs., ditto, 34°15'40"–34°15'53"N, 129°14'59"–129°15'50"E, 50–518 m alt., 18.V.2014, SM; 1 ex., Gongen-yama (Mt.), Izuhara-machi, 4.V.2005, Y. NOTSU leg.; 4 exs., Kuta, Izuhara-machi, 34°11'25"N, 129°16'6"E, 179 m alt., 6.V.2014, SM.

Distribution. Japan: Hokkaido, Honshu, Shikoku, Kyusyu, Tsushima (new record), Yaku-shima (NAKANE, 1959); Southern Kuril Isls.

Note. *Pteris wallichiana* AGARDH of the family Pteridaceae and *Pteridium aquilinum* (L.) KUHN of the family Dennstaedtiaceae have been reported as the host plants of this species (SASAOKA, 2009; Control Station for Pests of Iwate Pref., 2013). We collected four specimens from *Polystichum* sp. of the family Dryopteridaceae in Kuta, Izuhara-machi, Tsushima by beating. It might suggest that this species also utilizes *Polystichum* sp. This is the first record of the species from Tsushima.

4. *Microlanguria jansoni jansoni* (CROTCH, 1873)

[Japanese name: Keshi-kometsukimodoki]

(Figs. 2D, 3C)

Specimens examined. [Tsushima] 2 exs., Kôtsuki, Izuhara-machi, 34°11'7"N, 129°11'16"E, 32 m alt., 11.X.2014, SM; 3 exs., Agami, Izuhara-machi, 34°9'39"N, 129°16'4"E, 292 m alt., 27.IX.2014,

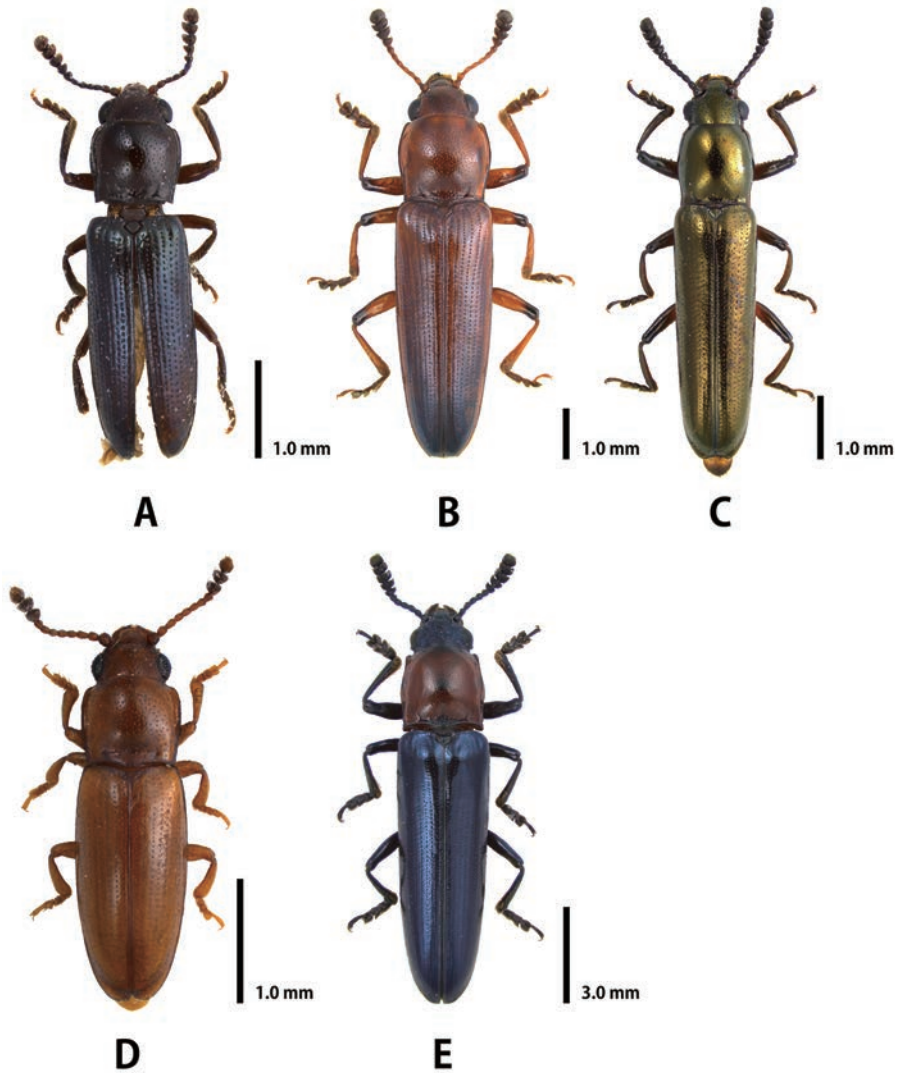


Fig. 2. Habitus of the lizard beetles collected from Tsushima and Iki-no-shima. — A, *Anadastus matsuzawai*; B, *A. praeustus*; C, *Languriomorpha lewisii*; D, *Microlanguria jansoni jansoni*; E, *Tetrphala fryi*.

SM; 1 ex., ditto, 11.X.2014, SM.

Distribution. Japan: Honshu, Shikoku, Kyushu, Tsushima, Gotô Isl. (EJIMA *et al.*, 1981), Ryukyu Isl.; China; Taiwan; Borneo; India; Sri Lanka.

Note. All specimens were collected by sifting litter of *Miscanthus sinensis* (THUNB.) ANDERSSON of the family Poaceae.

5. *Tetrphala fryi* (FOWLER, 1886)

[Japanese name: Tsushima-kometsukimodoki]

(Figs. 2E, 3D, 3E)

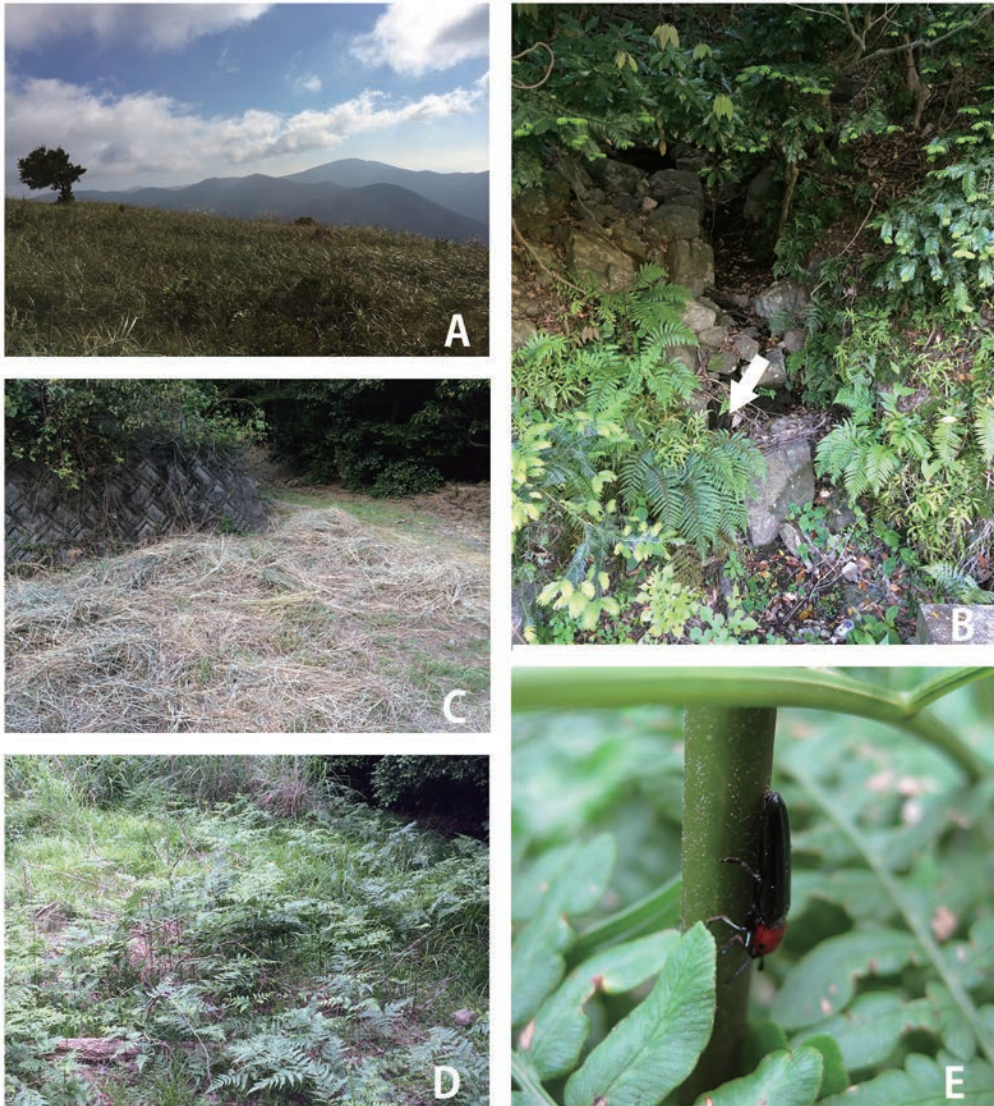


Fig. 3. Habitats of the lizard beetles in Tsushima. ——— A, Habitat of *Miscanthus sinensis*, on the top of Ariake-yama (Mt.); B, habitat of *Languriomorpha lewisii* with *Polystichum* sp. in Kuta; C, habitat of *Microlan-guria jansonii jansonii* with litter of *Miscanthus sinensis* in Kôtsuki; D, habitat of *Tetrphala fryi* with *Pteridium aquilinum* in Kechi; E, *T. fryi* on a leaf stem of *P. aquilinum* in Kechi.

Specimens examined. [Tsushima] 1 ex., from Sago to Sasuna, Kamiagata-chô, 16.V.1978, S. HISAMATSU leg., (EUMJ); 1 ex., Seta, Kamiagata-machi, 14.VII.2012, T. SONOBE leg.; 13 exs., Kechi, Mitsushima-machi, 34°15'26"N, 129°17'44"E, 52 m alt., 1.VI.2014, SM.

Distribution. Japan: Tsushima; China.

Note. *Pteridium aquilinum* (L.) KUHN of the family Dennstaedtiaceae is known as an adult feeding plant of this species (KUROSAWA, 1968). According to KUROSAWA (1968) and our field observation, this species has an interesting escape behavior. The beetles usually stay downwards on the leaf stem

of host plant, and when are disturbed, they hide quickly in the opposite side as well known in shield bugs and leaf hoppers (Fig. 3E).

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要 約

松尾 進・原 有助：対馬および壱岐のコメツキモドキの目録（鞘翅目オオキノコムシ科コメツキモドキ亜科）。—— 対馬および壱岐のコメツキモドキの目録を作成し、それぞれに生態学的な知見を付記した。加えて、これら2島と九州との間で本族の種数の比較を行った。本論文で対馬からルイスコメツキモドキ *Languriomorpha lewisii* (CROTCH, 1873), および対馬と壱岐からツマグロヒメコメツキモドキ *Anadstus praeustus* (CROTCH, 1873) を新たに記録した。

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