

New Records of *Creophilus flavipennis* (Hope, 1831) from Taiwan Island and Lutao Island, Taiwan (Coleoptera: Staphylinidae)

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Abstract: *Creophilus flavipennis* (Hope, 1831) is reported from Taiwan island and Lutao Island for the first time. Based on iNaturalist data, new province records of the species from Hong Kong, Macao and Hainan in China are also provided. Finally, the recent records of *C. flavipennis* in East Asia are briefly discussed.

Keywords: Fauna, Oriental region, citizen science, East Asia, rove beetle

Creophilus flavipennis (Hope, 1831) is widely distributed in the Oriental and southeastern Palearctic regions, with a doubtful record from New Guinea (Clarke, 2011). Records of the species in East Asia currently include Iriomote-Jima Island, Japan (Hayashi & Shōyama, 2013), and Kinmen Island and Lanyu Island, Taiwan (Hu, 2020; Chou & Hayashi, 2020). Hu (2020) predicted *C. flavipennis* might also occur on Taiwan island due to the disjunction between Kinmen island and Lanyu Island. In the present paper, we report the first specimen of *C. flavipennis* from Taiwan island, which supports the prediction of Hu (2020). Further records of *C. flavipennis* were extracted from iNaturalist, and new provincial records of the species are provided.

The examined specimens are deposited in the following institutions: FSHc—Fang-Shuo Hu, private collection, Yilan, Taiwan; BHHc—Bin-Hong Ho, private collection, Taipei, Taiwan; NMNS—National Museum of Natural Science, Taichung, Taiwan (J.-F. Tsai); PYHc—Pai-Yu Huang, private collection, Changhua, Taiwan. The records from iNaturalist are summarized in Supplementary data I (<http://doi.org/10.5281/zenodo.7033852>).

Material examined. TAIWAN: Pingtung County: 1 ♂, Shihtzu, Shouka (壽卡), 300m, 2022, IV-25, Leg. Yi-Ting CHUNG, CCCC (NMNS); 1 ♂ 1 ♀, Neiwen (內文), Shizi Township, 25-II-2022, leg. P.-Y. Huang by HID light trap (PYHc). **Taitung County:** 2 ♂♂ 5 ♀♀, Lutao Is., Nanliao village (南寮村), alt. 125 m, 22.66545°N 121.47758°E, 21.VI.2022, B.H. Ho leg. (LT) (NMNS, FSHc, BHHc); 1 ♀, Lutao Is., Mt. Amei (阿眉山), 22.65827°N 121.49265°E, alt. 276 m, 23.VI.2022, B.H. Ho & Y. Ho leg. (LT) (BHHc).

Remarks. The pubescence on the elytra of specimens from Lutao Is. (Fig. 1) is relatively darker than those from other localities.

Based on our results and the records from iNaturalist, new records of the species from Taiwan Island, Green Island, Hong Kong, Macao and Hainan are reported for the first time. It is still uncertain whether the current distribution of *C. flavipennis* in East Asia is due to natural or human-assisted dispersal, or the result of range shifts due to climate change. Within the genus *Creophilus*, *C. maxillosus* and *C. erythrocephalus* are reported as introduced species in Southern America and Hawaii, but the dispersal abilities of these species are also uncertain (Newton, 1997; Navarrete-Heredia et al., 2002; Asenjo & Clarke, 2007). The island hopping dispersal abilities of *Creophilus* species may be a pivotal point in solving such a question.

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Figure 1. Habitus of male specimen of *Creophilus flavipennis* (Hope, 1831) from Lutao Island.

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橙翅嗜肉隱翅蟲於臺灣本島與綠島之新紀錄（鞘翅目：隱翅蟲科）

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摘要：橙翅嗜肉隱翅蟲被首次記錄於臺灣本島與綠島，基於 iNaturalist 的資料，此種亦首次記錄於香港、澳門與海南，本文亦簡短討論橙翅嗜肉隱翅蟲近期於東亞地區的擴散事件。

關鍵字：動物相、東方區、公民科學、東亞、隱翅蟲