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New Distributional Records of Two Termitophilous Rove Beetles (Coleoptera, Staphylinidae) in Japan

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Two rove beetle species in the tribe Termitohospitini (Coleoptera: Staphylinidae: Aleocharinae), *Sinophilus yukoae* Maruyama et Iwata, 2002 and *Japanophilus hojoi* Maruyama et Iwata, 2002, are termitophiles associated with the Formosan subterranean termite, *Coptotermes formosanus* Shiraki, 1909 (Blattodea, Rhinotermitidae). *Sinophilus yukoae* was recorded from the Nansei Archipelago (Iheya-jima, Ishigaki-jima, and Iriomote-jima Islands), and *J. hojoi* was reported from the Tokara Archipelago (Nakano-shima and Suwanose-jima Islands) and Yaku-shima Island in the original descriptions (Maruyama & Iwata, 2002). Subsequently, both beetles were collected in coastal regions of Wakayama Prefecture, Central Japan (Maruyama *et al*., 2012). We renew the distributional ranges of the two beetles here.

Sinophilus yukoae Maruyama et Iwata, 2002

[Japanese name: Ie-shiroari-hanekakushi]

Sinophilus yukoae Maruyama et Iwata, 2002: 422 (original description); Maruyama *et al*. 2012: 607 (record from Wakayama Pref.).

Specimens examined. Japan, Kagoshima Pref.: 1 ♂, Yushima-chô, Satsuma-Sendai-shi, 20.XII.2015, H. Hirose leg., 8.X.2017, T. Sasaki & H. Hirose exp. Yaku-shima Is.: 1 ♂, 1 ♀, Onoaida-rindô, 9.IX.2012., T. Kanao leg., KT357 (colony ID). Okinawa-jima Is.: 1 ♀, Oku, Kunigami-gun, 6.VII.2012, T. Kanao leg., KT341; 1 ♀, Kurashiki Dam, Okinawa-shi, 26°23’35”N, 127°48’25”E, 77 m alt., 18.V.–1.VI.2016, OKEON Churamori Project leg., SLAM trap (Sea, Land, and Air Malaise trap), S0029 (trap code), OK01380 (collection code) authorized by Okinawa Prefecture (Okinawa Prefecture Order Dam Office No. 3); 1 ♀, Takiyamabaru, Okinawa-shi, 26°24’47”N, 127°47’24”E, 122 m alt., 2–16.XI.2016, OKEON Churamori Project leg., SLAM trap, S0014, OK02657, authorized by Okinawa City Board of Education (Okinawa Municipal Museum No. 0410001).

Distribution. Japan (Wakayama Pref., Kagoshima Pref., Yaku-shima Is., Okinawa-jima Is., Iheya-jima Is., Ishigaki-jima Is., and Iriomote-jima Is.).

Notes. Two specimens from Okinawa-jima Island were collected using Malaise traps, indicating that this species can fly and may enter or leave host termite colonies during its adult stage.

Japanophilus hojoi Maruyama et Iwata, 2002

[Japanese name: Daruma-ie-shiroari-hanekakushi]

Japanophilus hojoi Maruyama et Iwata, 2002: 427 (original description); Maruyama *et al*., 2012: 607 (record from Wakayama Pref.).

Specimens examined. Japan, Kagoshima Pref.: 1 ♂, 2 ♀♀, Yushima-chô, Satsuma-Sendai-shi, 20.XII.2015, H. Hirose leg., 7–8.X.2017, T. Sasaki & H. Hirose exp. Amami-Ôshima Is.: 2 ♂♂, Koshuku, Naze, 28°21’53”N, 129°28’49”E, 18.V.2017, T. Kanao leg., KT738; 3 ♂♂, same data as the former specimens except for KT739; 1

♂, 2 ♀♀, Yamato-son, 28°19’57”N, 129°25’02”E, 18.V.2017, T. KANAO leg., KT741; 1 ♂, Kamiya, Sumiyô-cho, 28°18’07”N, 129°24’04”E, 18.V.2017, T. KANAO leg., KT745.

Distribution. Japan (Wakayama Pref., Kagoshima Pref., Yaku-shima Is., Tokara-Nakano-shima Is. and Tokara-Suwanose-jima Is.).

Biogeographical Notes

About 100 years ago, NAWA (1914), under the pseudonym "Konchû-Ô", reported and illustrated an unidentified staphylinid, collected from a *Coptotermes formosanus* nest in Fukuoka Prefecture, in the northern part of Kyushu. IWATA and NAOMI (1998) cited this record and discussed its biogeographical significance. MARUYAMA and IWATA (2002) also argued the similarity between NAWA’s unidentified staphylinid and *Japanophilus*, and suggested the possibility of including Kyushu in the natural distribution of *C. formosanus*, since the host termite’s natural distribution is defined by the presence of species-specific inquilines (IWATA, 2000). Discovery of the two staphylinid species in Wakayama Prefecture (MARUYAMA *et al*., 2012) led to the inclusion of central Honshu in the range of *C. formosanus* and suggested the presence of the two staphylinids in Shikoku and Kyushu. The present report on the discovery of both staphylinids in southern Kyushu strongly supports the argument by IWATA and NAOMI (1998), MARUYAMA and IWATA (2002), and MARUYAMA *et al*. (2012). A survey of *C. formosanus* nests in Shikoku and northern Kyushu is needed for the biogeography not only of Japanese Termitohospitini, but also of the economically important host termite, *C. formosanus*.

Captures of *Sinophilus yukoae* with Malaise traps shed light on the biology of termitophilous staphylinids, as almost nothing is known about the migratory capability of these beetles among host termite nests. This may also have some implications for the biogeography of termitophilous staphylinids and host termites.

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