

## Weevils (Coleoptera, Curculionoidea) from Uke-jima and Yoro-jima Islands, the Amami Islands, the Ryukyus, Southwestern Japan

Hiroaki KOJIMA<sup>1)</sup> and Mika WATANABE<sup>2)</sup>

<sup>1)</sup>Laboratory of Entomology, Tokyo University of Agriculture,  
1737 Funako, Atsugi, Kanagawa, 243–0034 Japan

<sup>2)</sup>Department of Education for Childcare, Tokyo Kasei University,  
2–15–1 Inariyama, Sayama, Saitama, 350–1398 Japan

**Abstract** A total of 38 species of weevils are recorded from Uke-jima and Yoro-jima Islands, the Amami Islands, Kagoshima Prefecture. All of them are new to the fauna of these islands, except one species recorded to date.

The Amami Islands, an area of the candidate of the World Natural Heritage, has one of the highest weevil diversity and endemism among the Ryukyus, southwestern Japan, and slightly less than 200 species of weevils have ever been recorded (KOJIMA & WATANABE, 2014). The weevil fauna of Amami-Ōshima Is., the largest main island of the islands, has primarily been surveyed so far though it is still far in condition from fully investigated. In contrast, the fauna of the adjacent islands such as Kakeroma-jima, Uke-jima and Yoro-jima, located on the southernmost part of the main island have never been focused on the survey. Only a single species of weevil has ever been known from Uke-jima Is. on record (NAKAMINE, 2006).

In this paper, we record a number of weevils, recently obtained by the short survey conducted in spring on Uke-jima and Yoro-jima Isls., with some biological information. All the species listed below are new to the fauna of Uke-jima and/or Yoro-jima Isls., except *Curculio hilgendorfi*. A total of 28 and 15 species of weevils were recorded from Uke-jima and Yoro-jima Isls., respectively.

All of the specimens treated here were collected by the senior author and are preserved in the Laboratory of Entomology, Tokyo University of Agriculture, Atsugi. Scientific names in the next line follow recent catalogues edited by LÖBL and SMETANA (2011, 2013). The following abbreviations are used for collecting data: UK — Uke-jima Is. and YO — Yoro-jima Is. The survey conducted at Mt. Ōyama on Uke-jima Is. was permitted by the Setouchi Town-office. This study was supported by the JSPS KAKENHI (No. 15K06937).

### A List of Curculionoidea from Uke-jima and Yoro-jima Isls.

#### Family Anthribidae

1. *Araecerus fasciculatus* (DEGEER, 1775)

*Specimens examined.* YO: 1 ex., Ikeji, 24–25.III.2015; 1 ex., Yoro, 26.III.2015.

2. *Valenfriesia nitida* (MORIMOTO, 1978)

*Specimen examined.* YO: 1 ex., Yoro, 26.III.2015.

Family **Rhynchitidae**3. *Auletobius planifrons* SAWADA, 1993

*Specimens examined.* UK: 3 exs., Mt. Ôyama, 25.III.2015; 1 ex., Heriport, 25.III.2015.

*Note.* Weevils were captured on *Castanopsis sieboldii* (Fagaceae; Sudajii in Japanese).

4. *Pseudomesauletes uniformis* (ROELOFS, 1874)

*Specimen examined.* UK: 1 ex., Mt. Ôyama, 25.III.2015.

5. *Caenorhinus insularis* (SAWADA, 1993)

*Specimen examined.* UK: 1 ex., Mt. Ôyama, 25.III.2015.

6. *Cneminvolvulus cornix* (SAWADA, 1993)

*Specimens examined.* UK: 1 ex., Ikeji, 24–25.III.2015; 2 exs., Mt. Ôyama, 25.III.2015. YO: 7 exs., Yoro to Takabaru, 27.III.2015.

*Note.* Several adults were captured on *Machilus thunbergii* (Lauraceae; Tabunoki in Japanese).

7. *Eugnamptobius sauteri* (VOSS, 1922)

*Specimen examined.* YO: 1 ex., Yoro to Takabaru, 27.III.2015.

Family **Dryophthoridae**8. *Sphenocorynes ocellatus* (PASCOE, 1887)

*Specimens examined.* UK: 1 ex., Ikeji, 24–25.III.2015; 1 ex., Mt. Ôyama, 25.III.2015; 2 exs., North of Ikeji, 26.III.2015. YO: 8 exs., Yoro, 26.III.2015; 6 exs., Yoro to Takabaru, 27.III.2015 (on *Alpinia* spp.).

9. *Odoiporus longicollis* (OLIVIER, 1807)

*Specimens examined.* UK: 1 ex., Ikeji, 24–25.III.2015; YO: 6 exs., Yoro to Takabaru, 27.III.2015 (on banana).

10. *Cosmopolites sordidus* (GERMER, 1824)

*Specimens examined.* UK: 6 exs., Ikeji, 24–25.III.2015 (on banana).

Family **Curculionidae**11. *Curculio notsui* ALONSO-ZARAZAGA et CALDARA, 2013

*Specimens examined.* UK: 7 exs., Mt. Ôyama, 25.III.2015.

*Note.* Weevils were captured on *Quercus miyagii* and probably also on *Castanopsis sieboldii* (Fagaceae; Okinawa-urajirogashi and Sudajii respectively in Japanese).

12. *Curculio hilgendorfi* (HAROLD, 1878)

*Note.* Record from UK was cited from NAKAMINE (2006).

13. *Shigizo rhombiformis* MORIMOTO, 1981

*Specimens examined.* YO: 16 exs., Yoro to Takabaru, 27.III.2015 (on *Ficus microcarpa*).

14. *Ochyromera japonica* (ROELOFS, 1875)

*Specimens examined.* UK: 9 exs., Ikeji, 24–25.III.2015 (on *Podocarpus macrophyllus*).

15. *Sphinxis ihai* (CHÛJÔ et VOSS, 1960)

*Specimens examined.* UK: 2 exs., Mt. Ôyama, 25.III.2015.

16. *Orchestes horii* (KÔNO, 1937)

*Specimens examined.* UK: 15 exs., Ikeji, 24–25.III.2015 (on *Celtis* sp.).

17. *Orchestes yokoae* MORIMOTO et MIYAKAWA, 1996

*Specimens examined.* UK: 21 ex., Mt. Ôyama, 25.III.2015.

*Note.* This rare weevil is considered to be endemic to Amami-Ôshima Is. and no information is known about the biology (KOJIMA & MORIMOTO, 2007). A number of adults were collected from *Quercus miyagii* on Uke-jima Is.

18. *Coeliodes amamianus* YOSHITAKE, 1999

*Specimens examined.* UK: 4 exs., Mt. Ôyama, 25.III.2015 (on *Castanopsis sieboldii*).

19. *Scleropteroides hypocrita* (HUSTACHE, 1916)

*Specimens examined.* YO: 3 exs., Yoro, 26.III.2015.

20. *Ceutorhynchus albosuturalis* (ROELOFS, 1875)

*Specimens examined.* UK: 2 exs., Ikeji, 24–25.III.2015.

*Note.* This weevil is known to occur widely in northeast Asia (Japan including Tsushima Isls., Kuril Isls., Sakhalin, E. Siberia, Korea and China) (YOSHITAKE *et al.*, 2006; COLONNELLI, 2004), and injures cruciferous plants, such as *Brassica*, *Capsella*, *Cardamine*, *Nasturtium*, *Raphanus* spp. (MORIMOTO, 1957). No record has hitherto been known from the Ryukyus, southwestern Japan. New to the Ryukyus.

21. *Telephae matsudai* MORIMOTO, 1960

*Specimen examined.* UK: 1 ex., Mt. Ôyama, 25.III.2015.

22. *Phaeopholus ornatus* ROELOFS, 1873

*Specimen examined.* UK: 1 ex., Yoro to Takabaru, 27.III.2015.

23. *Viticis aerates* (MORIMOTO, 1983)

*Specimen examined.* YO: 1 ex., Yoro, 26.III.2015 (on *Ficus macrocarpa*).

24. *Colobodes ornatoideus* MORIMOTO, 1988

*Specimen examined.* UK: 1 ex., Mt. Ôyama, 25.III.2015.

25. *Colobodellus postfasciatus* MORIMOTO et MIYAKAWA, 1985

*Specimen examined.* UK: 1 ex., Mt. Ôyama, 25.III.2015.

26. *Cotasteromimus squamiger* MORIMOTO et MIYAKAWA, 1985  
*Specimens examined.* UK: 4 exs., Mt. Ôyama, 25.III.2015.
27. *Microcryptorhynchus nipponicus* MORIMOTO et MIYAKAWA, 1985  
*Specimens examined.* UK: 2 exs., Ikeji, 24–25.III.2015; 5 exs., Mt. Ôyama, 25.III.2015.
28. *Syrotelus umbrosus* (ROELOFS, 1875)  
*Specimens examined.* UK: 2 exs., Mt. Ôyama, 25.III.2015.
29. *Dryothribus mimeticus* HORN, 1873  
*Specimens examined.* YO: 4 exs., Takabaru-kaigan, 27.III.2015.
30. *Isodryothribus squamosus* KONISHI, 1962  
*Specimens examined.* YO: 8 exs., Takabaru-kaigan, 27.III.2015.  
*Note.* As this rare weevil is considered to be endemic to Takara-jima Is., the Tokara Islands (MORIMOTO, 1985), occurrence on Yoro-jima Is. represents the southernmost record of this species. The adults were collected from pieces of driftwood on seashore with *Dryothribus mimeticus*.
31. *Microtribus splendidus* KONISHI, 1962  
*Specimens examined.* YO: 2 exs., Yoro, 26.III.2015 (on *Cycas revoluta*).
32. *Oxydema* sp.  
*Specimens examined.* UK: 1 ex., Ikeji, 24–25.III.2015. YO: 4 exs., Yoro, 26.III.2015 (on *Cycas revoluta*).
33. *Nothomylocerus neglectus* (VOSS, 1971)  
*Specimens examined.* UK: 10 exs., Mt. Ôyama, 25.III.2015.  
*Note.* Weevils were captured on *Castanopsis sieboldii* and also on *Quercus miyagii*.
34. *Lepidepistomus dimorphus* KOJIMA et MORIMOTO, 2006  
*Specimens examined.* UK: 1 ex., Heriport, 25.III.2015; 4 exs., Mt. Ôyama, 25.III.2015.  
*Note.* Weevils were captured on *Castanopsis sieboldii*.
35. *Lepidepistomodes griseoides* (ZUMPT, 1937)  
*Specimens examined.* UK: 3 exs., Mt. Ôyama, 25.III.2015.
36. *Episomus mori* KÔNO, 1928  
*Specimens examined.* YO: 2 exs., Yoro to Takabaru, 27.III.2015 (on *Morus* sp.).
37. *Trachyphloeosoma setosum* WOLLASTON, 1869  
*Specimens examined.* UK: 11 exs., Mt. Ôyama, 25.III.2015 (by shifting litter).
38. *Scepticus uniformis* KÔNO, 1930  
*Specimens examined.* UK: 23 exs., North of Ikeji, 26.III.2015; 19 exs., Ikeji, 24–25.III.2015. YO: 22 exs., Takabaru-kaigan, 27.III.2015; 1 ex., Yoro to Takabaru, 27.III.2015.  
*Note.* Weevils were feeding leaves of seashore plants, such as *Vigna marina*, *Vitex rotundifolia*

and *Lysimachia mauritiana* (Fabaceae, Lamiaceae and Primulaceae; Hamaazuki, Hamagô and Hama-bossu in Japanese) on Uke-jima and Yoro-jima Islands.

## 要 約

小島弘昭・渡部美佳：奄美諸島請島，与路島のゾウムシ（鞘翅目ゾウムシ上科）。—— 奄美諸島の請島，与路島からはこれまで請島からのシイシギゾウムシ1種の記録があるに過ぎなかった。最近これら2島においてゾウムシ類の調査を行い，37新記録種を含む，計38種のゾウムシ上科甲虫を確認した。各島の内訳は，それぞれ請島28種，与路島15種となっている。

## References

- COLONNELLI, E., 2004. Catalogue of Ceutorhynchinae of the World, with a Key to Genera (Insecta: Coleoptera: Curculionidae). 124 pp. Argania editio, Barcelona.
- KOJIMA, H., & K. MORIMOTO, 2007. Notes on the flea weevil genus *Orchestes* in Japan (Coleoptera: Curculionidae: Rhamphini). *Entomological Review of Japan, Osaka*, **62**: 27–40.
- KOJIMA, H., & M. WATANABE, 2014. Weevil fauna of the Ryukyu Islands, Southwest Japan. *Nature and Insects, Tokyo*, **49**(5): 5–9. (In Japanese with English title.)
- LÖBL, I., & A. SMETANA (eds.), 2011. Catalogue of Palaearctic Coleoptera, **7**. Curculionoidea I. 373 pp. Apollo Books, Stenstrup.
- LÖBL, I., & A. SMETANA (eds.), 2013. Catalogue of Palaearctic Coleoptera, **8**. Curculionoidea II. 700 pp. Brill, Leiden.
- MORIMOTO, K., 1957. Studies on Japanese species of the genus *Ceutorrhynchus* injurious to the cruciferous plants (Col., Curculionidae). *Science Bulletin of the Faculty of Agriculture, Kyushu University*, **16**: 59–74, 4 pls. (In Japanese with English title and summary.)
- MORIMOTO, K., 1985. Introduction to the studies on the weevil subfamilies Cossoninae, Dryophthoridae and tribe Stromboscerini. III. Cossoninae. Part 2. *Kaoku-gaichû, Yokohama*, (23/24): 19–28. (In Japanese with English title.)
- NAKAMINE, K., 2006. Insects recorded in September, 2004 in Uke-jima, Amami-islands, Kagoshima Prefecture. *Bulletin of the Kagoshima Prefectural Museum*, (25): 63–67. (In Japanese with English title.)
- YOSHITAKE, H., H. KOJIMA & K. MORIMOTO, 2004. Ceutorhynchinae. Pp. 100–106. In KOJIMA, H., & K. MORIMOTO (eds.), An online checklist and database of the Japanese weevils (Insecta; Coleoptera; Curculionoidea) (excepting Scolytidae and Platypodidae). *Bulletin of the Kyushu University Museum*, (2): 33–147. (In Japanese with English title and summary.)

Manuscript received 31 August 2015;  
revised and accepted 18 September 2015.