

Distributional Note on *Echiaster unicolor* BERNHAUER (Coleoptera, Staphylindiae, Paederinae)

Yoshihiro SENDA¹⁾ and Tateo ITO²⁾

¹⁾ c/o Hiwa Museum of Natural Science, Hiwa 1119–1, Hiwa, Shôbara City, Hiroshima, 727–0301 Japan
E-mail: geostix666@gmail.com

²⁾ E12–102, Otokoyama Yutoku 7, Yawata, Kyoto, 614–8371 Japan
E-mail: itokyoto@gb3.so-net.ne.jp

Echiaster unicolor BERNHAUER, 1922, which was originally described as a variety of *E. japonicus* BERNHAUER from Taiwan (BERNHAUER, 1922, 1923; ASSING, 2011), is widely distributed in East Asia (ASSING, 2011, 2014), but this species seems to be rare. Recently, we examined some specimens of this species collected from various localities in Japan and Taiwan. In this paper, we present a list of previous and new records of this species.

We appreciate Mr. Yasutoshi SHIBATA (Machida City) for providing the distributional information of this species. We also thank to Dr. Hiroyuki YOSHITOMI (Ehime University Museum), Dr. Volker ASSING (Hannover), Mr. Hirofumi FUJIMOTO (Takamastu City), Mr. Shôichi IMASAKA (Kurume City), Mr. Shûgo INOUE (Faculty of Agriculture, Kyushu University), Mr. Yûzô KURODA (Maizuru City), Mr. Isao MATOBA (Yuasa Town), Mr. Kôzô MIZUNO (Uji City), Mr. Tetsuo MURAO (Maizuru City), Mr. Iwao OKAMOTO (Kure City), and Mr. Hideyuki YOKOZEKI (Yokkaichi City) for their kind help in various ways.

Echiaster unicolor BERNHAUER, 1922

(Figs. 1–2)

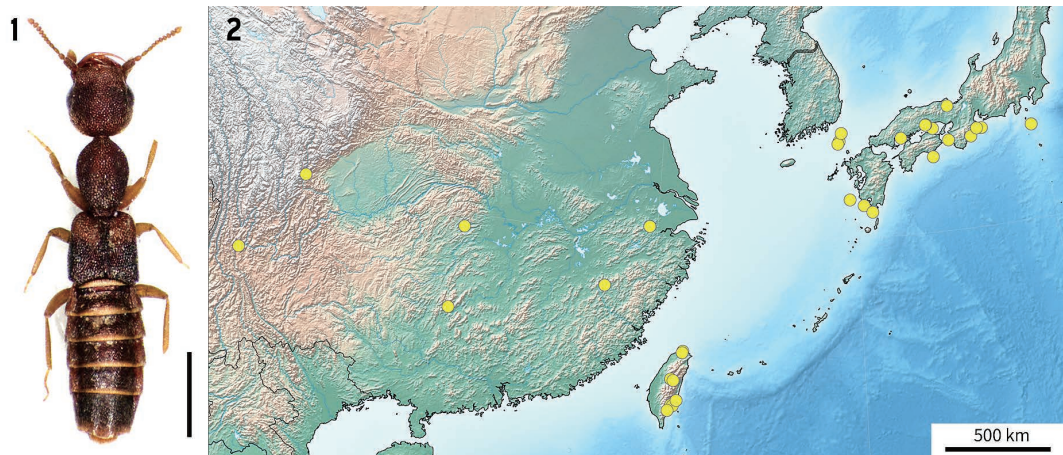
Echiaster unicolor BERNHAUER, 1922: 230 [as variety of *Echiaster japonicus*]. — SMETANA, 2004: 590 [catalogued]. — ASSING, 2011: 451 [as valid name]. — SCHÛLKE & SMETANA, 2015: 938 [catalogued]. — ASSING, 2014: 1088 [distribution].

Echiaster japonicus BERNHAUER, 1923 [1922]: 123. — ASSING, 2011: 451 [as junior synonym of *unicolor*].

Echiaster unicolor japonicus: HERMAN, 2003: 4. — SMETANA, 2004: 590 [catalogued]. — SHIBATA *et al.*, 2013: 153 [catalogued].

Previous records. Japan. Honshu: [Mie] Mikizaki, Owase-shi (NARUKAWA *et al.*, 2006); Daiô-chô (NARUKAWA *et al.*, 2011); Minamiise-chô (YOKOZEKI, 2002). [Kyoto] “Kyoto Pref.” (Kyoto Pref., 2015; without detail data). [Hiroshima] Kure-shi (NAKAMURA, 2014). Izu Isls.: Miyake-jima Is. (WATANABE & SOHMA, 1972). Shikoku: “Shikoku” (SHIBATA *et al.*, 2013). [Kagawa] Kankakedôri, Shôdo-shima Is. (FUJIMOTO, 2011). Tsushima Is.: “Tsushima” (BERNHAUER, 1923). Koshiki Is.: Sebi, Shimo-koshiki-jima (WATANABE, 1998). Taiwan. “Formosa” (BERNHAUER, 1922). [Taipei] Yangming-shan (ASSING, 2011); Tianmu Gudao (ASSING, 2011). [Taitung] Gaotai (ASSING, 2011); Zhiben (ASSING, 2011, 2014); Tulan (ASSING, 2011); Hsinkang-shan (ASSING, 2014). China. [Zhejiang] Tianmu-shan (ASSING, 2011). [Fujian] Wuyi-shan (ASSING, 2014). [Hunan] Tianzi-shan Nat. Res. (ASSING, 2011). [Guangxi] Maoer-shan (ASSING, 2014). [Sichuan] Luding County (ASSING, 2014). [Yunnan] Dali City (ASSING, 2011).

Specimens examined. Japan. Honshu: [Kyoto] 1 ex., Kuwagai, Maizuru-shi, 5.VIII.2004, T. MURAO leg. (voucher specimen for the record by Kyoto Pref. (2015)). [Mie] 1 ex., Daiô-chô, 2.IV.1993, H. YOKOZEKI leg. (voucher specimen for the record by NARUKAWA *et al.*, 2011); 1 ex., ditto, but 31.V.1994. [Wakayama] 2 exs., Oura, Hidaka-chô, 7.X.2016, I. MATOBA leg. [Okayama] 1 ex., Mt. Tatsunokuchi-yama (alt. 100 m), Okayama-



Figs. 1–2. *Echiaster unicolor* BERNHAUER. — 1, Dorsal habitus, specimen collected from Tsushima Island, Japan (scale: 1.0 mm); 2, geographical distribution (this map was generated using the online SimpleMappr tool by SHORHOUSE (2010)).

shi, 1.V.2019. Y. SENDA leg.; 1 ex., ditto, but 2.I.2017, M. TAKEDA leg.; 1 ex., Tsushimahigashi, Okayama-shi, 20.III.2020, H. TAKEDA leg. [Hiroshima] 1 ex., Kure, 4.III.1990, I. OKAMOTO leg. Shikoku: [Kochi] 5 exs., Muroto, 4.VI.1988, T. ITO leg.; 1 ex., ditto, but 5.VI.1988. Kyushu: [Kagoshima] 1 ex., Kawanabe-chô, 31.X.2005, S. IMASAKA leg.; 1 ex., Satahetsuka, Minamiôsumi-chô, 16.VIII.2019, S. INOUE leg. Tsushima Is.: 1 ♂, Kechi, Mitsu-shima-chô, 14.VII.2000, T. KAN leg.; 1 ex., Mt. Tatera-yama, 15.IX.1995, H. YOKOZEKI leg.; 4 exs., Shûshi, Kamitsuhima-chô, 13.V.2017, T. ITO leg.; 1 ex., ditto, but 22.VII.2018. Taiwan. [Taipei] 1 ex., Yangmingshan, 6.V.1983, T. ITO leg. [Nantou] 6 exs., Fenglinkouchi, 14.IX.2012, T. ITO leg.; 1 ex., Aowanda, 17.IX.2012, T. ITO leg.

Distribution. Japan (Honshu, Izu Isls. (Miyake-jima Is.), Shikoku, Shôdo-shima Is., Tsushima Is. and Koshiki Isls. (Shimo-koshiki-jima Is.); Kyushu — new record), Taiwan and China.

Notes. According to SHIBATA *et al.* (2013), this species is distributed on mainland of Shikoku, but no previous records of this species from the mainland could be found in our literature survey.

References

- ASSING, V., 2011. A revision of *Sclerochiton* (Coleoptera: Staphylinidae: Paederinae). *Beiträge zur Entomologie, Berlin*, **61**: 413–453.
- ASSING, V., 2014. Three new species and additional records of *Echiaster* from Asia (Coleoptera: Staphylinidae: Paederinae). *Linzer biologische Beiträge*, **46**: 1087–1096.
- BERNHAEUER, M., 1922. SAUTER'S Formosa-Ausbeute: Staphylinidae. *Archiv für Naturgeschichte (A)*, Berlin, **88**: 220–237.
- BERNHAEUER, M. 1923 [1922]. Neue Staphyliniden der palaearktischen Fauna. *Koleopterologische Rundschau, Wien*, **10**: 122–128.
- FUJIMOTO, H., 2011. [Records of the rove beetles collected from Kagawa Prefecture and identified by Mr. Yasutoshi SHIBATA]. *Heriguro, Takamatsu*, (32): 35–38. (In Japanese.)
- HERMAN, L. H., 2003. Nomenclatural changes in the Paederinae (Coleoptera: Staphylinidae). *American Museum Novitates, New York*, **3416**: 1–28.
- Kyoto Prefecture, 2015. The List of Biological and Geological Components of the Natural Environment of Kyoto Prefecture [online]. Available from: <http://www.pref.kyoto.jp/kankyo/mokuroku/index.html> (accessed on 30 December 2019). (In Japanese.)
- NAKAMURA, S., 2014. Staphylinidae. Pp. 596–657. In NAKAMURA, S. (ed), *The Insect of Hiroshima Prefecture, Revised and Enlarged Edition*. 2,650 pp. Hiba Society of Natural History, Shôbara. (In Japanese, with English title.)

- NARUKAWA, N., J. NAKAYAMA, Y. OKA, H. YOKOZEKI, M. INAGAKI, K. KANNOH & F. ICHIKAWA, 2011. [Beetles of Shima Peninsula]. Pp. 66–195. In Mie Entomologists' Association (ed.), [*Insects of Shima Peninsula*]. 302 pp. Mie Entomologists' Association, Suzuka. (In Japanese.)
- NARUKAWA, N., H. ICHIHASHI, A. AMAGASU, F. ICHIKAWA, M. INAGAKI, K. KANNOH, K. MAEKAWA & H. YOKOZEKI, 2006. [Beetles of coastal laurel forest of Kumano Sea]. Pp. 63–188. In NARUKAWA, N., H. ICHIHASHI, M. NAKANISHI & H. KAWAKITA (eds.), [*Insects of Coastal Laurel Forest of Kumano Sea*]. 285 pp. Mie Entomologists' Association, Suzuka. (In Japanese.)
- SHIBATA, Y., M. MARUYAMA, H. HOSHINA, T. KISHIMOTO, S.-I. NAOMI, S. NOMURA, V. PUTHZ, T. SHIMADA, Y. WATANABE & S. YAMAMOTO, 2013. Catalogue of Japanese Staphylinidae (Insecta: Coleoptera). *Bulletin of the Kyushu University Museum, Fukuoka*, (11): 69–218.
- SCHÜLKE, M., & A. SMETANA, 2015. Staphylinidae. Pp. 304–900. In LÖBL, I., & D. LÖBL (eds.), *Catalogue of Palaearctic Coleoptera*, **2**. Hydrophiloidea – Staphylinoidea. Revised and updated edition. xxv + 900 pp. Brill, Leiden / Boston.
- SHORTHOUSE, D. P., 2010. SimpleMappr, an online tool to produce publication-quality point maps [online]. Available from: <https://www.simplemappr.net/> (accessed on 10 August 2020).
- SMETANA, A., 2004. Paederinae. Pp. 579–624. In LÖBL, I., & A. SMETANA (eds.), *Catalogue of Palaearctic Coleoptera*, **2**. Hydrophiloidea – Histeroidea – Staphylinoidea. 942 pp. Apollo Books, Stenstrup.
- WATANABE, Y., 1998. New records of staphylinid beetles (Coleoptera) from Shimo-koshiki-jima Island of the Koshiki Islands off southwestern Kyushu, Japan. *Elytra, Tokyo*, **26**: 313–314.
- WATANABE, Y., & K. SOHMA, 1972. Insect-fauna of Miyake-jima Island in the Izu Islands. *Journal of Agricultural Science, Tokyo Nogyo Daigaku, Tokyo*, **17** (1): 1–58. (In Japanese, with English summary.)
- YOKOZEKI, Y., 2002. [Rove beetles of Mie Prefecture, Japan]. *Hirakura, Tsu*, (46): 1–22. (In Japanese.)

Manuscript received 5 July 2020;
revised and accepted 22 September 2020.