

琉球大学学術リポジトリ

宮古諸島下地島の海底洞窟から得られたメヒカリセキヨウエビ(十脚目:コエビ下目:セキヨウエビ科)

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***Bresilia rufioculus* Komai & Yamada, 2011 (Decapoda: Caridea: Bresiliidae) from a submarine cave in Shimoji-jima Island, Miyako Island Group, southern Ryukyus, Japan**

Yoshihisa Fujita^{1, 4}, Masaru Mizuyama² and Yusuke Yamada³

¹ Okinawa Prefectural University of Arts, 1-4 Shuri-Tounokura, Naha, Okinawa 903-8602, Japan.

² Graduate School of Engineering and Science, University of the Ryukyus,

1 Senbaru, Nishihara-cho, Okinawa 903-0213, Japan.

³ Ishikawa, Uruma, Okinawa 904-1106, Japan.

⁴ Corresponding author (e-mail: fujitayo@okigei.ac.jp)

Abstract. A rare bresiliid shrimp, *Bresilia rufioculus* Komai & Yamada, 2011, is recorded on the basis of a male specimen collected from a submarine cave in Shimoji-jima Island, Miyako Island Group, southern Ryukyus, Japan. This record represents the first finding of a male individual of *B. rufioculus*, and slightly extends the geographical range of this species southward.

Records

Recent faunal surveys of submarine caves in the Ryukyu Islands have discovered new and rare decapod species (Fujita & Naruse 2011; Fujita et al. 2013; Anker & Fujita 2014; Naruse & Fujita 2015; Fujita & Mizuyama 2016). During the course of surveys, we collected a rare bresiliid shrimp, *Bresilia*



Fig. 1. *Bresilia rufioculus* Komai & Yamada, 2011, collected from a submarine cave in Shimoji-jima Island, Miyako Island Group, southern Ryukyus, Japan (RUMF-ZC-02278, male, pcl. 1.6 mm).

図 1. 宮古諸島下地島の海底洞窟から採集されたメヒカリセキヨウエビ *Bresilia rufioculus* Komai & Yamada, 2011 (RUMF-ZC-02278, 雄, pcl. 1.6 mm).

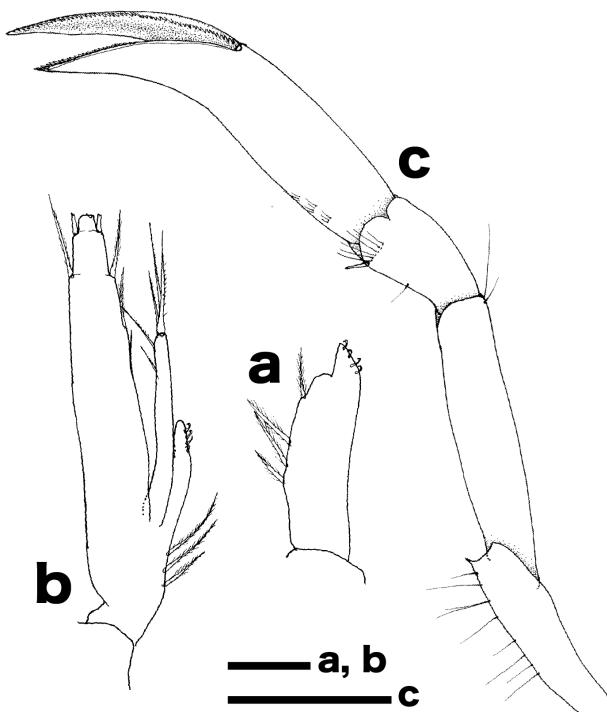


Fig. 2. *Bresilia rufioculus* Komai & Yamada, 2011 (RUMF-ZC-02278, male, pcl. 1.6 mm). a, endopod of first pleopod, left, posterior view; b, endopod with appendices interna and masculine of second pleopod, left, ventral view; c, first pereopod, left, lateral view. Scales: a, b = 0.1 mm; c = 0.5 mm.

図 2. メヒカリセキヨウエビ *Bresilia rufioculus* Komai & Yamada, 2011 (RUMF-ZC-02278, 雄, pcl. 1.6 mm). a, 第1腹肢内肢, 左, 腹面; b, 第2腹肢内肢および内肢突起と雄性突起, 左, 腹面; c, 第1胸脚, 左, 側面. スケール: a, b = 0.1 mm; c = 0.5 mm.

rufioculus Komai & Yamada, 2011 (Fig. 1), from Shimoji-jima Island, Miyako Island Group, southern Ryukyus, Japan. The species was first described based on 2 female specimens collected from a submarine cave in Ie-jima Island, central Ryukyus (Komai & Yamada 2011). Therefore, this discovery represents the second distributional record of the species and the first finding of a male individual. The present specimen is deposited in the Ryukyu University Museum, Fujukan, University of the Ryukyus, Japan (RUMF): RUMF-ZC-02278, male (pcl. 1.6 mm), Shimoji-jima Island, Miyako Island Group, south Ryukyus, Japan, submarine cave “Akuma-no-yakata (Devil’s Hole)”, SCUBA diving, depth: 20 m, leg. Y. Yamada & Y. Fujita, 26 January 2013.

The present specimen agrees well with the original description of the species by having the following characteristics: 1) the rostrum is

overreaching the distal end of the second segment of the antennular peduncle, 2) the dorsal margin of the rostrum is armed with 10 teeth (2 of which are on carapace), 3) the eyestalk is directed anteriorly, 4) the epistome possesses a long median process, 5) the third abdominal somite is not carinated, 6) the fourth and fifth abdominal pleurons are armed with 1 posteroventral tooth and 2 posterior teeth, respectively, 7) the telson bears 3 pairs of dorsolateral spines, and 8) the carapace and abdomen bear numerous striae on their surfaces (but only a few tegumental scales could be observed). The only mismatched character is the presence of a small tooth on the distoventral margin of the first pereopodal ischium (Fig. 2c), which is absent in the original description (Komai & Yamada 2011, Fig. 4c). This difference may be attributed to intraspecific or even sexual variation.

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References

- Anker, A. & Y. Fujita, 2014. On the presence of the anchialine shrimp *Calliastoma pholidota* Holthuis, 1973 (Crustacea: Decapoda: Caridea: Barbouriidae) in Shimoji Island, Ryukyu Islands, Japan Fauna Ryukyuana, 17: 7–11.
- Fujita, Y. & T. Naruse, 2011. *Catoptrus iejima*, a new species of cavernicolous swimming crab (Crustacea: Brachyura: Portunidae) from a submarine cave at Ie Island, Ryukyu Islands, Japan. Zootaxa, 2918: 29–38.
- Fujita, Y. & M. Mizuyama, 2016. New distributional record of *Atoportunus gustavi* Ng & Takeda, 2003 (Decapoda: Brachyura: Portunidae) from Okinawa-jima and Ie-jima Islands, Ryukyu Islands, southwestern Japan. Fauna Ryukyuana, 33: 19–20. [in Japanese with English abstract]
- Fujita, Y., T. Naruse & Y. Yamada, 2013. Two submarine cavernicolous crabs, *Atoportunus gustavi* Ng & Takeda, 2003, and *Neoliomera*

cerasinus Ng, 2002 (Crustacea: Decapoda: Brachyura: Portunidae and Xanthidae), from Shimojijima Island, Miyako Group, Ryukyu Islands, Japan. Fauna Ryukyuana, 1: 1–9. (In Japanese with English abstract)

Komai, T. & Y. Yamada, 2011. A new species of the caridean genus *Bresilia* Calman (Decapoda: Bresiliidae) discovered from a shallow-water submarine cave in Okinawa Islands, Japan. Bulletin of the National Museum of Nature and Science. Series A (Zoology), Supplement, 5: 71–82.

Naruse, T. & Y. Fujita, 2015. *Lipkemera ijima*, a new cavernicolous crab (Brachyura: Xanthidae) from a submarine cave at Ie Island, central Ryukyu Islands, Japan. Crustacean Research, 44: 21–27.

宮古諸島下地島の海底洞窟から得られたメヒカリセキヨウエビ（十脚目：コエビ下目：セキヨウエビ科）

藤田喜久^{1, 4}・水山 克²・山田祐介³

¹〒903-8602 沖縄県那覇市首里当蔵 1-4
沖縄県立芸術大学

²〒903-0213 沖縄県中頭郡西原町千原 1 番地
琉球大学大学院理工学研究科

³〒904-1106 沖縄県うるま市石川 1 丁目 38-14-201 号

⁴通信著者 (e-mail: fujitayo@okigei.ac.jp)

要旨. 宮古諸島下地島の海底洞窟からメヒカリセキヨウエビ *Bresilia rufioculus* Komai & Yamada, 2011 を記録した。今回得られた標本は雄個体であり、本種として初めての雄の記録となる。また、本種は、これまでに伊江島の海底洞窟からのみ記録されている稀種であり、今回の発見は、本種の 2 カ所目の産地記録となる。

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