# サンダルイシ (新称) Sandalolitha dentata Quelch, 1884 (イシサンゴ目: クサビライシ科) の西表島周辺からの記録, 及びサンダルイシと近似種ヘルメットイシ Sandalolitha robusta (Quelch, 1886) の識別形質について

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# Records of *Sandalolitha dentata* Quelch, 1884 (Scleractinia: Fungiidae) from around Iriomote Island, Ryukyu Islands, Japan, with a note on diagnostic characters of *S. dentata* and an allied species, *Sandalolitha robusta* (Quelch, 1886)

**Tohru Naruse[1], Daisuke Uyeno[2, 3] & Moritaka Nishihira[4]**

[1]Tropical Biosphere Research Center, Iriomote Station, University of the Ryukyus, 870 Uehara, Taketomi, Okinawa 907-1541, Japan (e-mail: naruse@lab.u-ryukyu.ac.jp)
[2]Florida Museum of Natural History, University of Florida, 1659 Museum Rd., Gainesville, FL 32611, U.S.A.
[3](Current affiliation) Graduate School of Science and Engineering, Kagoshima University, 1-21-35 Korimoto, Kagoshima-shi, Kagoshima 890-0065, Japan
[4]Okinawa Churashima Foundation, General Research Center, 888 Ishikawa, Motobu, Okinawa 905-0206, Japan

**Abstract.** *Sandalolitha dentata* Quelch, 1884, is recorded from around Iriomote Island, Ryukyu Islands, Japan, for the first time. *Sandalolitha dentata* was found from depths of about 20 to 40 m of reef slopes and a transitional zone with a gentle slope from the reef to a relatively flat bottom with sandy-muddy substratum in semi-surrounded bay-like waters. This report also reviews diagnostic characters of *S. dentata* and a morphologically allied and sympatric congener, *S. robusta* (Quelch, 1886). The two species can be distinguished from each other by the distributional pattern and density of corallites on the corallum and other characters. They are, however, difficult to be differentiated by the characters of the lower order septum and its ornamentations due to their wide ranges of variation.

## Introduction

Funauki Bay in the northwestern part of Iriomote Island is a relatively narrow bay with a length of about 5 km, but is relatively deep from the entrance (about 80 m depth) to near the river mouth of Kuira River (about 30 m depth). This relatively enclosed and deep environment hosts a number of unique taxa that are usually not found at coral reefs in more open waters. Such environments in the Ryukyu Islands are still insufficiently studied, which has led to a fare number of recent findings (e.g. Fujii & Naruse 2013; Obuchi 2014; Komai & Fujita 2014; Naruse, 2015).

We have found specimens of a mushroom coral that can be referable to *Sandalolitha dentata* Quelch, 1884 (Scleractinia: Fungiidae) from Funauki Bay and surrounding waters. Although *Sandalolitha robusta* (Quelch, 1886) (e.g. Shirai 1980; Nishihira & Veron 1995) and *S. dentata* (e.g. Shirai 1980 (see Hoeksema 1989); Loya et al. 2009) have been recorded from Japan, the *S. dentata* specimens we collected and identified appear to differ morphologically from the previous records from Japan. An opportunity is taken here to review the diagnostic characters of both *S. dentata* and *S. robusta* while taking size variations into consideration.

## Material and methods

Collected coralla were examined after bleaching and drying. Measurements refer to the corallum length (l), width (w), height (h), skeletal weight, horizontal projection area ($cm^2$) and number of corallites. The horizontal projection area was calculated by using Adobe Photoshop CS5 extented ver. 12.0.1 ×64, Adobe Illustrator CS5 ver. 15.0.1 and ImageJ ver. 10.2. Depth of the concavity of the corallum (when the corallum is turned upside down) was also measured in selected specimens. The materials examined are deposited in the Ryukyu University Museum, Fujukan (RUMF), University of the Ryukyus, Japan. Corals were collected under the permissions of the governor of Okinawa Prefecture (permission numbers 23-22, 24-2 and 24-60).

## Results and discussion

**Fungiidae Dana, 1846**
***Sandalolitha* Quelch, 1884**
***Sandalolitha dentata* Quelch, 1884**
(Figs. 1–4)

**Materials examined.** *Sandalolitha dentata* Quelch, 1884: RUMF-ZG-4371, 1 corallum, (430 mm (l), 240 mm (w), 130 mm (h), 905 g, 800.8 $cm^2$, 326 corallites, depth of the lower surface 98 mm), off Ida-no-hama, Funauki Bay, Iriomote Island, -40 m, coll. T. Naruse, D. Uyeno et al., 17 May 2012; RUMF-ZG-4373, 1 corallum (263 mm (l), 120 mm

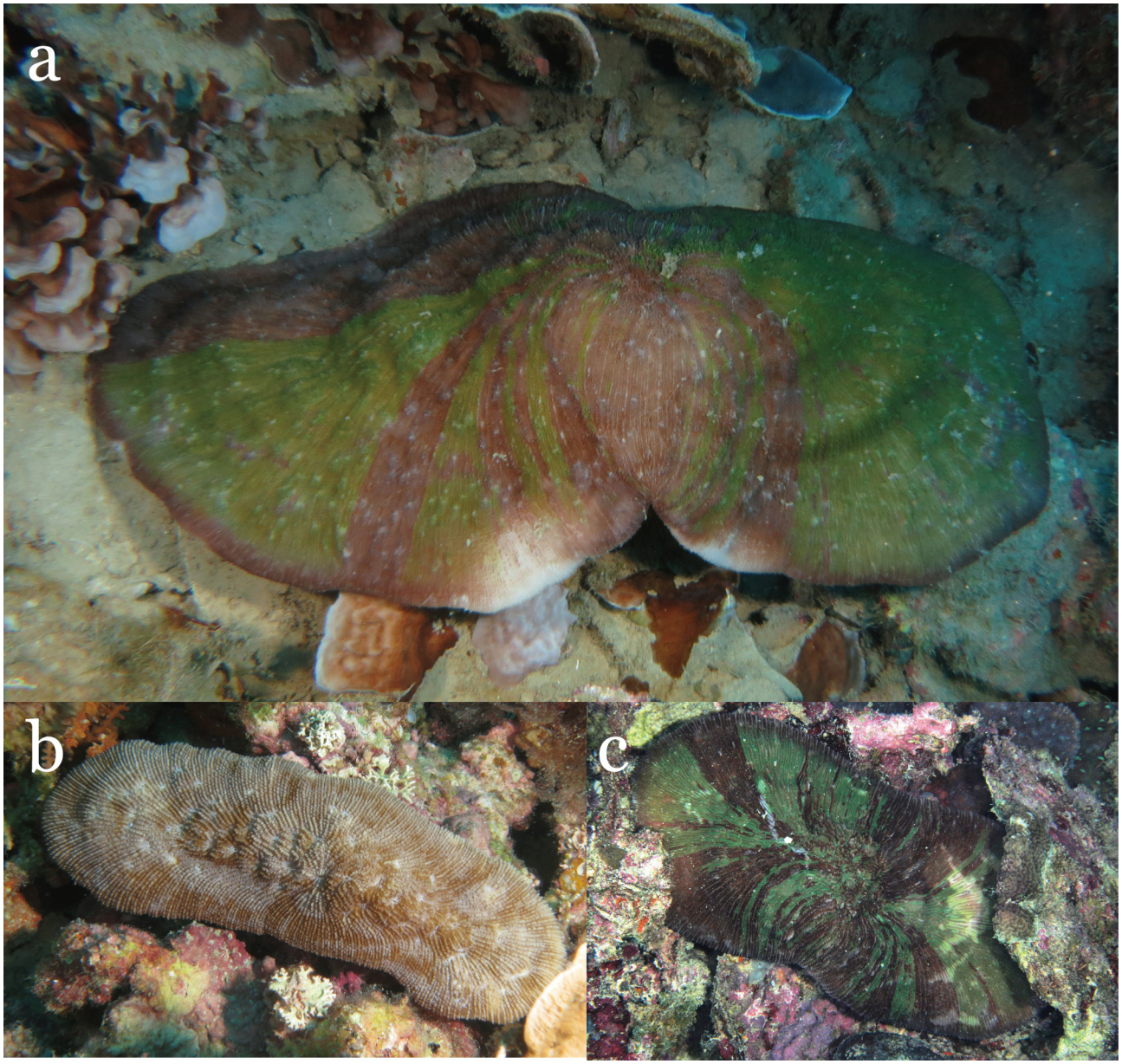
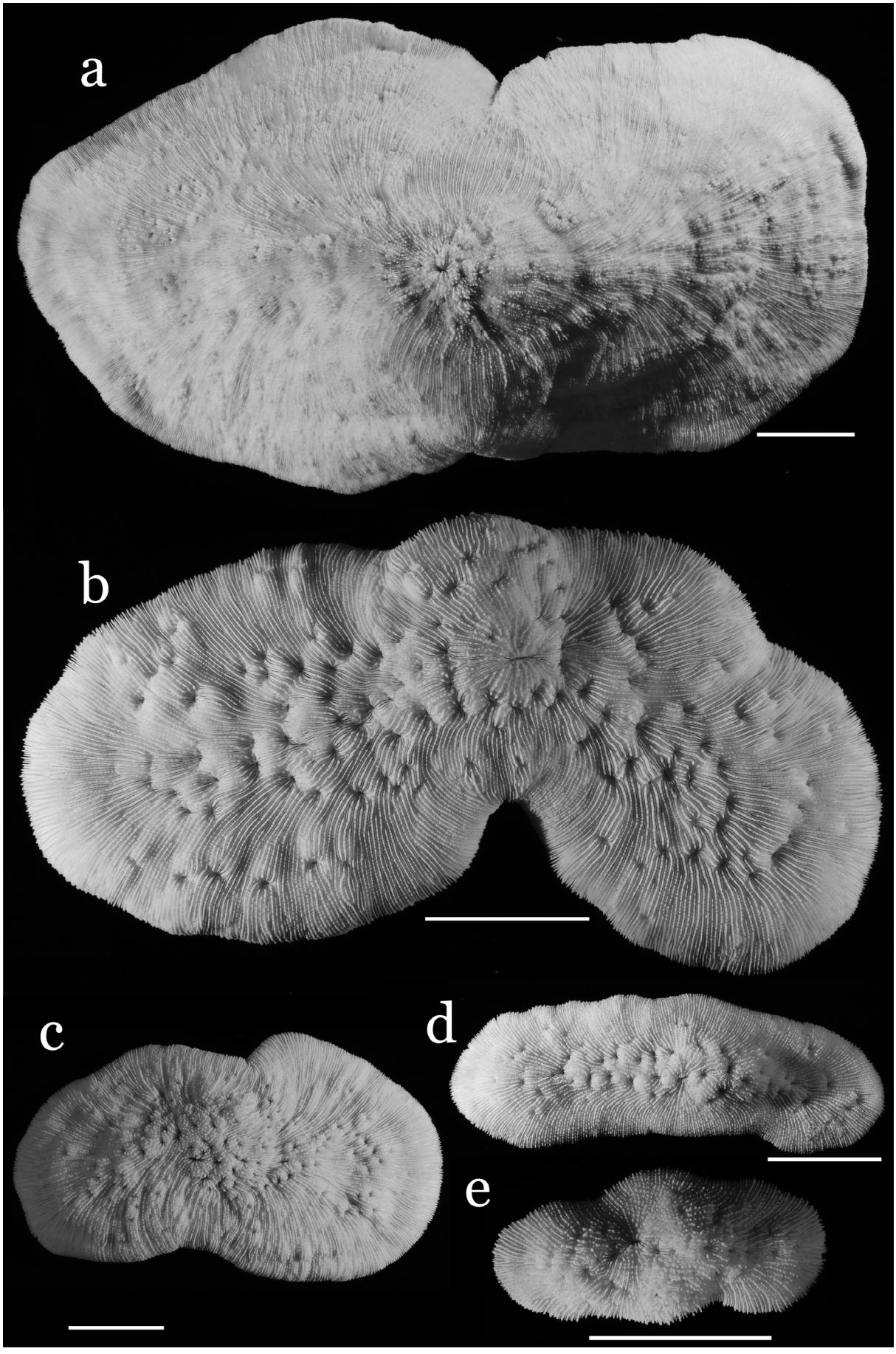


Fig. 1. Live colouration of *Sandalolitha dentata* Quelch, 1884. a, RUMF-ZG-4371, Funauki Bay, Iriomote Island, -40 m, photographed on 31 Aug. 2012; b, RUMF-ZG-4376, Amitori Bay, Iriomote Island, -27 m, photographed on 13 Jun. 2013; c, Madang Lagoon, Papua New Guinea, -25 m, photographed on 23 Nov. 2012, not collected.
図 1. 生時のサンダルイシ. a, RUMF-ZG-4371, 西表島船浮湾, -40m, 2012 年 5 月 17 日撮影; b, RUMF-ZG-4376, 西表島網取湾, -27m, 2013 年 6 月 13 日撮影; c, パプアニューギニア マダンラグーン, -25 m, 2012 年 11 月 23 日撮影, 採集せず.

(w), 45 mm (h), 946 g, 264.9 $cm^2$, 119 corallites, depth of the lower surface 20 mm), off southwest Uchibanare Island, Funauki Bay, Iriomote Island, -20–30 m, coll. H. Fukami, D. Uyeno & T. Naruse, 24 Mar. 2013; RUMF-ZG-4374, 1 corallum (92 mm (l), 40 mm (w), 20 mm (h), 44 g, 30.9 $cm^2$, 30 corallites), off southwest Uchibanare Island, Funauki Bay, Iriomote Island, -20–30 m, coll. H. Fukami, D. Uyeno & T. Naruse, 24 Mar. 2013; RUMF-ZG-4376, 1 corallum, (192 mm (l), 63 mm

Fig. 2. *Sandalolitha dentata* Quelch, 1884. a, RUMF-ZG-4371, 430 mm long; b, RUMF-ZG-4373, 263 mm long; c, RUMF-ZG-4377, 230 mm long; d, RUMF-ZG-4376, 192 mm long; e, RUMF-ZG-4374, 92 mm long. Scales = 50 mm.
図 2. サンダルイシ. a, RUMF-ZG-4371, 長さ 430 mm; b, RUMF-ZG-4373, 長さ 263 mm; c, RUMF-ZG-4377, 長さ 230 mm; d, RUMF-ZG-4376, 長さ 192 mm; e, RUMF-ZG-4374, 長さ 92 mm. スケール = 50 mm.


a
b
c
d
e

(w), 30 mm (h), 229g, 104.7 $cm^2$, 51 corallites), east off a jetty, Amitori Bay, Iriomote Island, -27m, coll. T. Naruse, 13 Jun. 2013; RUMF-ZG-4377, 1 corallum, (230 mm (l), 133 mm (w), 40 mm (h), 420g, 231.9 $cm^2$, 108 corallites), east off a jetty, Amitori Bay, Iriomote Island, -31m, coll. T. Naruse, 13 Jun. 2013.

**Comparative materials.** *Sandalolitha robusta* (Quelch, 1886): RUMF-ZG-4375, 1 corallum (230 mm (l), 115 mm (w), 30 mm (h), 519 g, 211.2 $cm^2$, 197 corallites, depth of the lower surface about 10 mm), off southwest Uchibanare Island, Funauki Bay, Iriomote Island, -17 m, coll. T. Naruse, H. Fukami & D. Uyeno, 24 Mar. 2013; RUMF-ZG-4378, 1 corallum (142 mm (l), 86 mm (w), 35 mm (h), 351 g, 96.2 $cm^2$, 82 corallites), off north of Baras Island, between Iriomote and Hatoma Islands, coll. D. Uyeno & T. Naruse, 17 Jun. 2013; RUMF-ZG-4379, 1 corallum (223 mm (l), 122 mm (w), 35 mm (h), 759 g, 191.0 $cm^2$, 163 corallites), off north of Baras Island, between Iriomote and Hatoma Islands, coll. D. Uyeno & T. Naruse, 17 Jun. 2013; RUMF-ZG-4380, 1 corallum (298 mm (l), 181 mm (w), 82 mm (h), 2860 g, 432.9 $cm^2$, 620 corallites), off Ida-no-hama, Funauki Bay, Iriomote Island, coll. D. Uyeno & T. Naruse, Jun. 2013; RUMF-ZG-4381, 1 corallum (52.5 mm (l), 39.0 mm (w), 17.0 mm (h), 17.3 g, 15.9 $cm^2$, 33 corallites), Hanagoi (*Amethyst anthias*) reef, south of Sotobanare Island, Funauki Bay, coll. T. Naruse, 8 Jun. 2013.

**Morphological features.** Corallum polystomatous, free-living, irregularly elliptical, often constricted around center of long axis (Figs. 1a, 2a–c, e). Largest corallum examined in this study very thin, light (RUMF-ZG-4371, 430 mm (l), skeletal weight 905 g), other coralla thick, relatively heavy (e.g. RUMF-ZG-4373, 263 mm (l), skeletal weight 946 g). Primary stoma placed around center and highest portion of corallum (Fig. 3a), septa running radially from primary stoma towards margin. Corallites tend to be arranged along long axis, but also scattered over corallum. Calice appears slightly produced from coenosteum perpendicularly upwards (Fig. 4f). Septa arranged densely, lower order septa rather thinner, lower, higher order septae often arranged alternately (Figs. 3a, c, 4a, c). Septa weakly curved around center of calice (Figs. 3a, 4a), but mostly straight, especially around margin (Figs. 3c, 4c). Lower order septa tend to be slightly thicker around center of corallum with concentrated corallites (Figs. 3a, 4a) than around margin (Figs. 3c, 4c); difference in thickness of septa more distinct in small coralla (Figs. 3a, c, 4a, c). Upper margin of septum lined with ornamentations (teeth); teeth height almost same with its septum width, teeth covered with burs (Fig. 3b, d, 4b, d), teeth shape variable, relatively higher and longer in small coralla (Fig. 4b, d), but becomes lower and shorter in large coralla (Fig. 3b, d). Septa directed medially within calice, medially lower than coenosteum; septa outside calice protruded upwards. Costae distinct around margin of corallum, but become fused and indistinguishable towards center (Figs. 3f, 4e). Upper margin of costa with short spines, spines covered with granules, or long and bur-like ornamentations.

**Colouration.** The largest corallum examined in the present study (RUMF-ZG-4371) had characteristic colouration; radially arranged light green and russet belts are arranged alternately (Fig. 1a). This colour pattern was also observed in the corallum found at Madang Lagoon, Papua New Guinea (Fig. 1c). All the other coralla were uniformly brown (Fig. 1b). The radially arranged colour pattern may be expressed in relatively larger coralla. All examined specimens (including RUMF-ZG-4371 collected about 11:30 am) were collected during daytime, and no emerged polyps were observed.

**Morphological variation.** The largest corallum examined in the present study (RUMF-ZG-4371; 430 mm (l)) is very thin, dome-shaped, with an inner height of the dome of 98 mm, and very light (skeletal weight 905 g). In contrast, the corallum with 263 mm (l) (RUMF-ZG-4373) is thick, with shallower depression (about 20 mm), and heavier by 41g than RUMF-ZG-4371 that is longer than RUMF-ZG-4373 by 167 mm. The thickness of the lower order septum and the shape of the tooth are also variable (see section of Morphological features).

We have not studied what environmental factors affect the corallum shapes, but Hoeksema & Moka (1989: 156) outlined possible effects from combinations of several factors including sedimentation, waves, direction of right sources, etc.

**Distribution and habitat.** *Sandalolitha dentata* from around Iriomote Island was found at depths of about 20 to 40 m of reef slopes and a transitional zone with a gentle slope from the reef to a relatively flat bottom with sandy-muddy substratum in semi-surrounded bay-like waters (Fig. 1a).

Hoeksema (1989) noted the distributional range

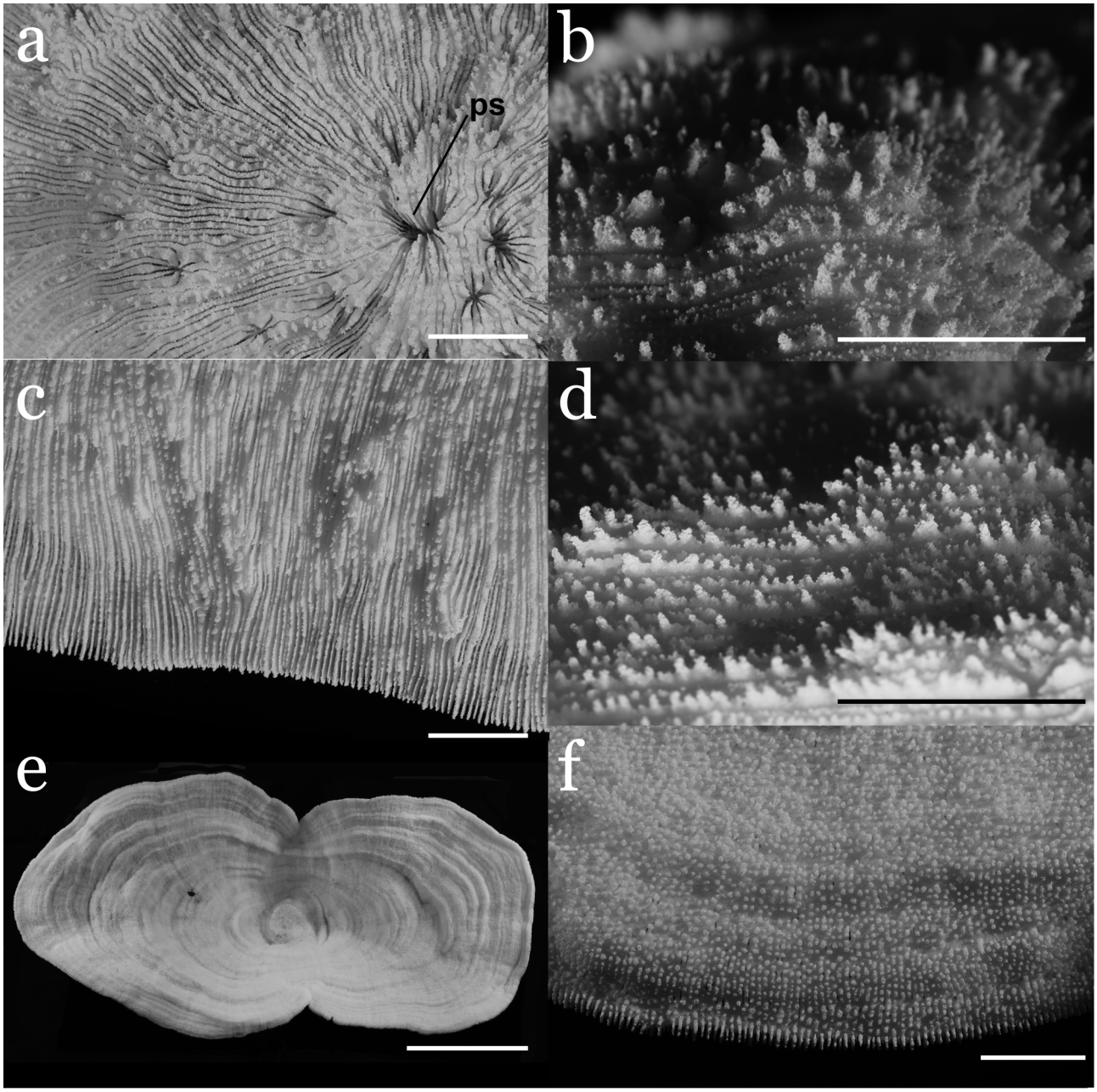



Fig. 3. *Sandalolitha dentata* Quelch, 1884 (RUMF-ZG-4371, 430 mm long). a, primary stoma, its surrounding corallites and septa; b, septa around primary stoma, with ornamentation (teeth); c, septa near marginal part of corallum; d, septa near marginal part of corallum, with ornamentation (teeth); e, underside of corallum; f, costae around marginal part of corallum. "ps" indicates primary stoma. Scales, a–d, f = 10 mm; e = 100 mm.
図 3. サンダルイシ (RUMF-ZG-4371, 長さ 430 mm). a, 初口とその周辺のサンゴ個体と隔壁; b, 初口周辺の隔壁と隔壁上の鋸歯の状態; c, サンゴ体縁辺部の隔壁; d, サンゴ体周辺部の隔壁と隔壁上の鋸歯の状態; e, サンゴ体の裏側; f, サンゴ体縁辺部の肋. 図中の ps は初口を示す. スケール, a–d, f = 10 mm; e = 100 mm.

of *S. dentata* from the Maldives to the Tuamotu Archipelago. As noted in the section of taxonomy and identification, the record of *S. dentata* from Okinawa by Hoeksema (1989) was probably erroneous, but it is possible that the corallum shown in Loya et al. (2009: fig. 1bD) from Sesoko Island is *S. dentata* (see section of taxonomy and identification). Nishihira & Veron (1995) also suspected Hoeksema's (1989) record of the present species from Japan, and following Veron (1992; 1993), they also doubted its distribution other than Indonesia and Cocos (Keeling) Island in Indo-West Pacific. However, such a limited distribution is not correct as Nemenzo & Ferraris (1982: 209, fig. 9) recorded the present species from depths of 24–36 m at Mactan Island, adjacent to Cebu Island, the

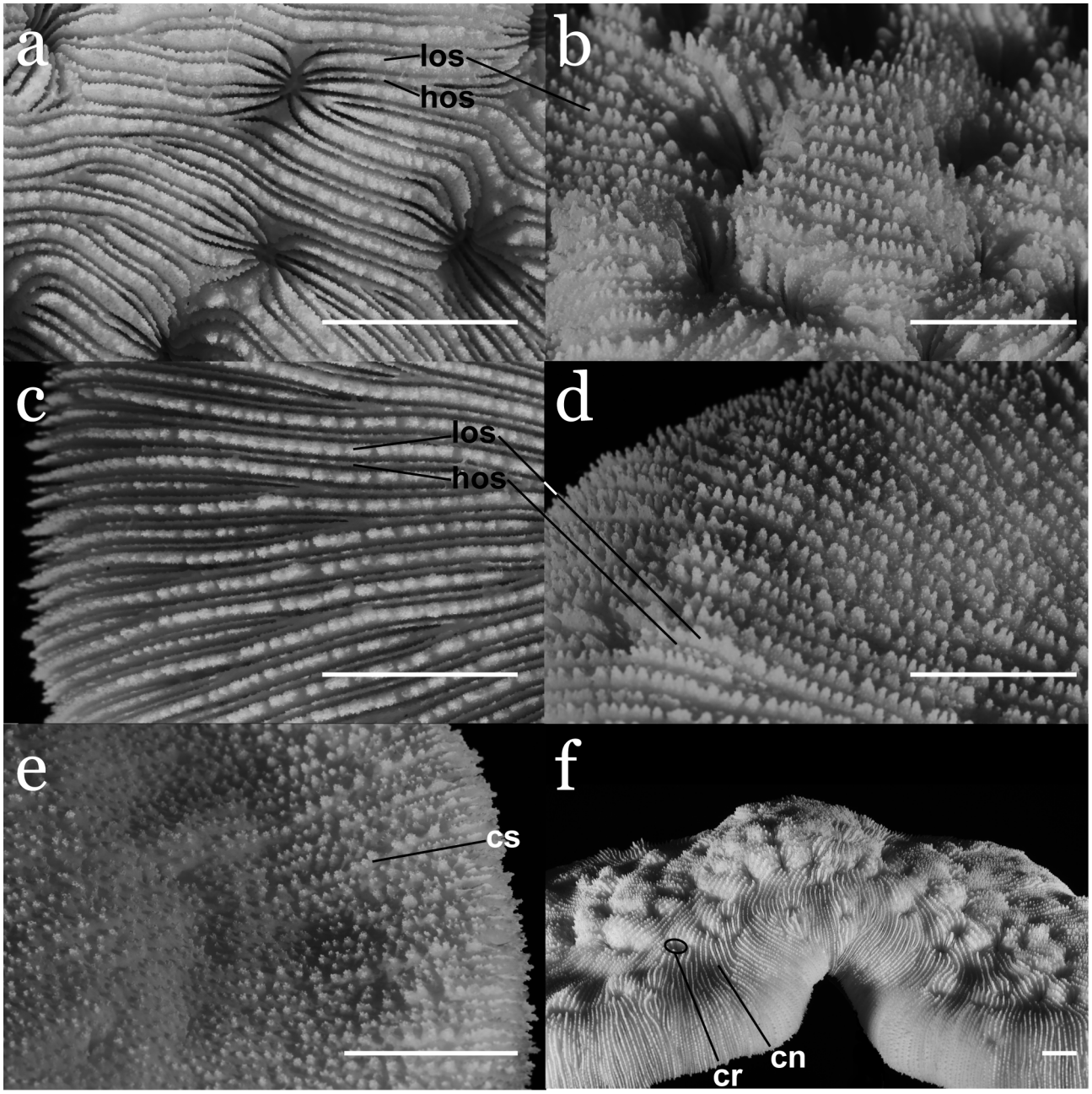



Fig. 4. *Sandalolitha dentata* Quelch, 1884 (RUMF-ZG-4373, 263 mm long). a, primary stoma, its surrounding corallites and septa; b, septa around primary stoma, with ornamentation (teeth); c, septa near marginal part of corallum; d, septa near marginal part of corallum, with ornamentation (teeth); e, costae around marginal part of corallum; f, coenosteum and corallites. Abbreviations as follows: hos, higher order septum; los, lower order septum; cn, coenosteum; cr, corallite or calice; cs, costa. Scales = 10 mm.

図 4. サンダルイシ (RUMF-ZG-4373, 長さ 263 mm). a, 初口とその周辺のサンゴ個体と隔壁; b, 初口周辺の隔壁と隔壁上の鋸歯の状態; c, サンゴ体縁辺部の隔壁; d, サンゴ体周辺部の隔壁と隔壁上の鋸歯の状態; e, サンゴ体縁辺部の肋; f, 共骨部とサンゴ個体. 図中の各略号は以下の形質を示す: hos, 高次隔壁; los, 低次隔壁; cn, 共骨部; cr, サンゴ個体あるいは莢; cs, 肋. スケール = 10 mm.

Philippines, as *Parahalomitra sluiteri* van der Horst, 1921, describing that "Corallites relatively few, conspicuous ones confined to central region so that wide zone toward border devoid of corallites, except at both ends where a few smaller (young) ones present" (Nemenzo & Ferraris 1982: 121). These distributional patterns of the corallites agree to those of *S. dentata* very well. One of the authors (DU) also photographed a corallum of about 400 mm long at a depth of about 25 m at Madang

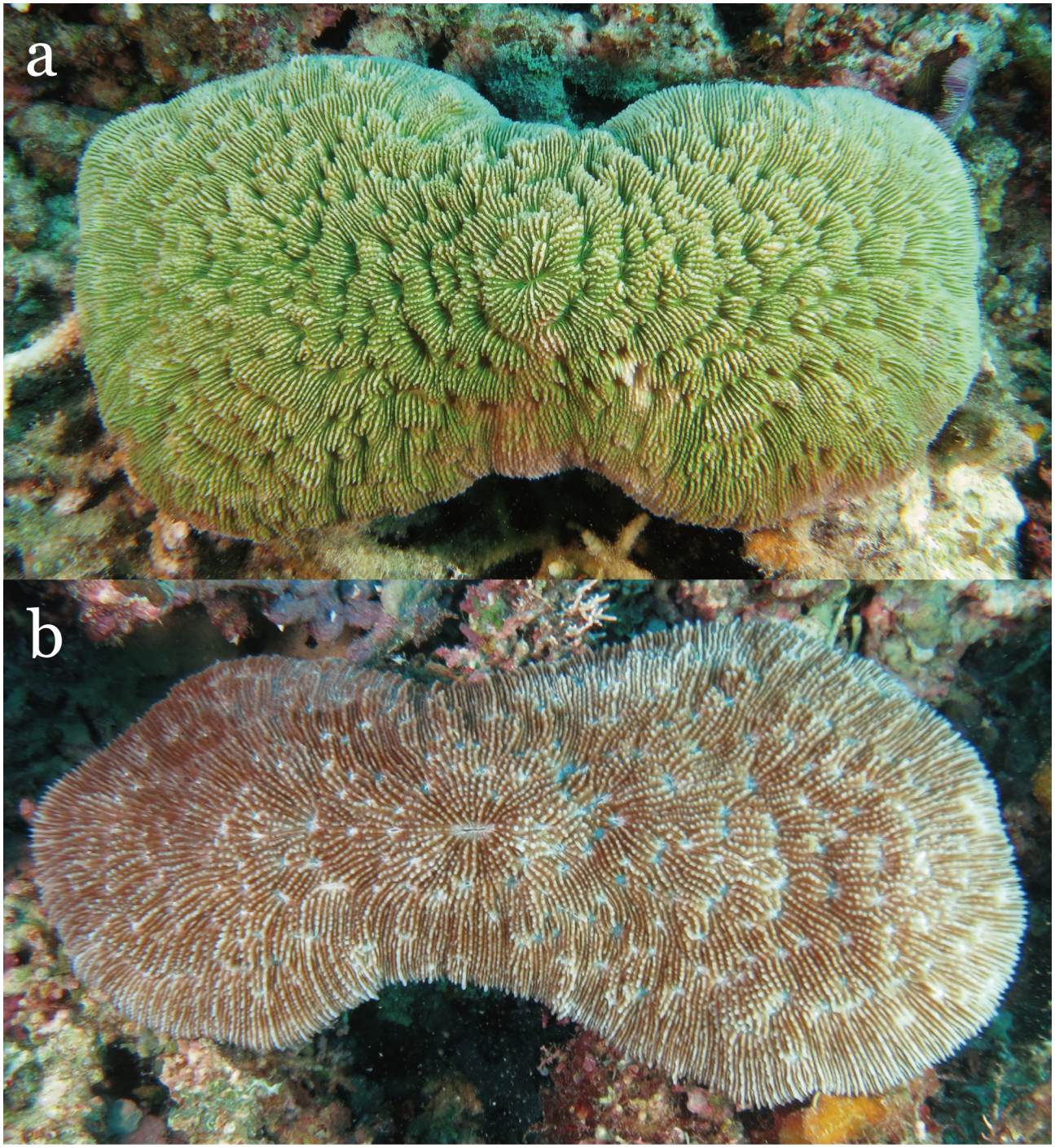



Fig. 5. Live colouration of *Sandalolitha robusta* (Quelch, 1886). a, Amitori Bay, Iriomote Island, -10 m, photographed on 31 Aug. 2012, specimen not collected; b, RUMF-ZG-4375, Funauki Bay, Iriomote Island, -17 m, photographed on 24 Mar. 2013.
図 5. 生時のヘルメットイシ. a, 西表島網取湾, -10.8 m, 2012 年 8 月 31 日撮影, 標本は採集せず; b, RUMF-ZG-4375, 西表島船浮湾, -17 m, 2013 年 3 月 24 日撮影.

Lagoon, Papua New Guinea (Fig. 1b). Also, many photographs of *S. dentata* from the Philippines and Papua New Guinea have been posted on the internet. This information suggest that the present species should be widely distributed over Indo-West Pacific waters.

Both *S. dentata* and its congener, *S. robusta*, occur around Iriomote Island. *Sandalolitha robusta* is often observed at depths of 20 m, whereas *S. dentata* appears to be more common in deeper waters (T. Naruse & D. Uyeno, personal observation). Hoeksema (2012a, c) also noted that

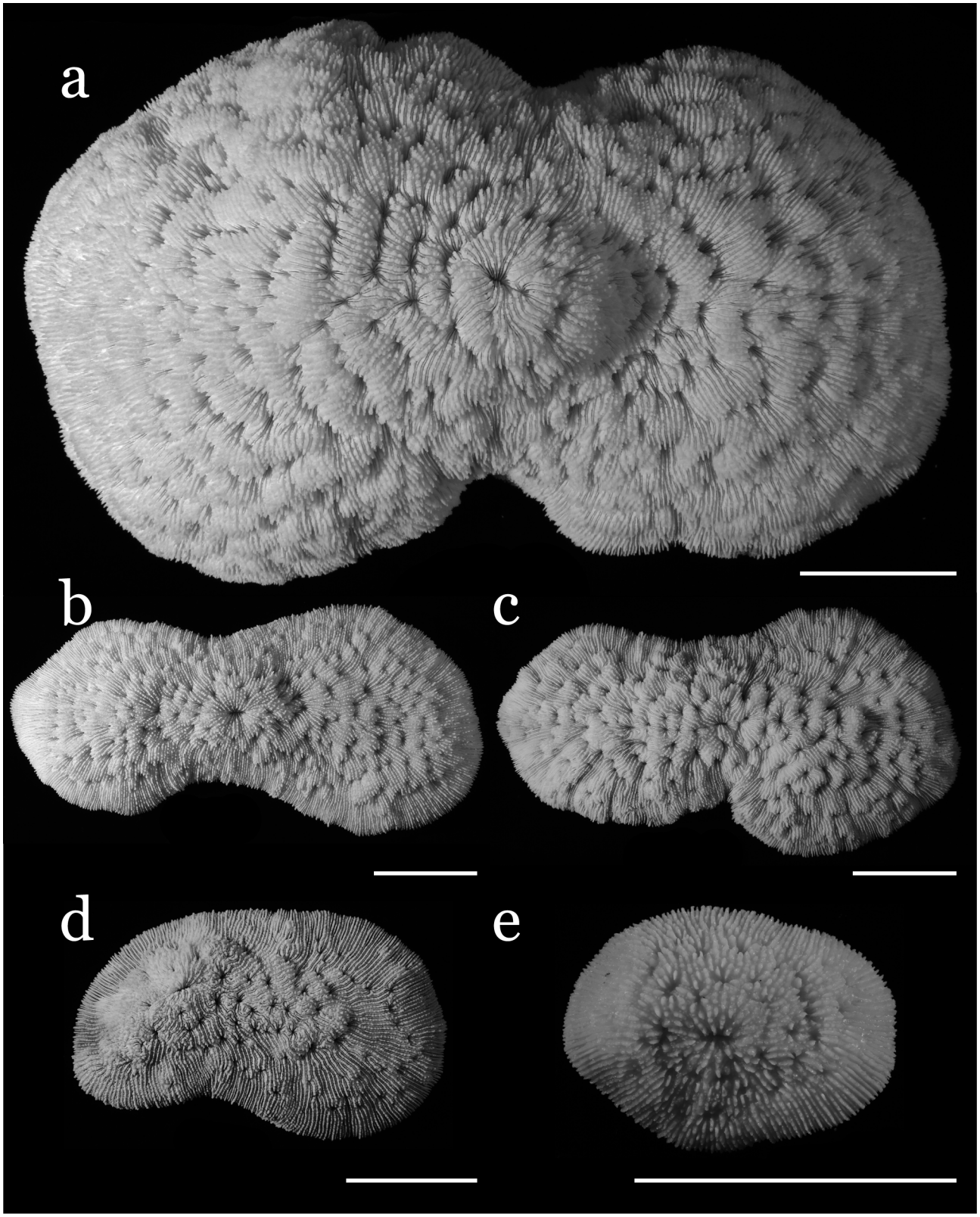



Fig. 6. *Sandalolitha robusta* (Quelch, 1886). a, RUMF-ZG-4380, 298 mm; b, 3 RUMF-ZG-4375, 230 mm long; c, RUMF-ZG-4379, 223 mm long; d, RUMF-ZG-4378, 142 mm long; e, RUMF-ZG-4381, 52 mm long. Scales = 50 mm.
図 6. ヘルメットイシ. a, RUMF-ZG-4380, 長さ 298 mm; b, 3 RUMF-ZG-4375, 長さ 230 mm; c, RUMF-ZG-4379, 長さ 223 mm; d, RUMF-ZG-4378, 長さ 142 mm; e, RUMF-ZG-4381, 長さ 52 mm. Scales = 50 mm.

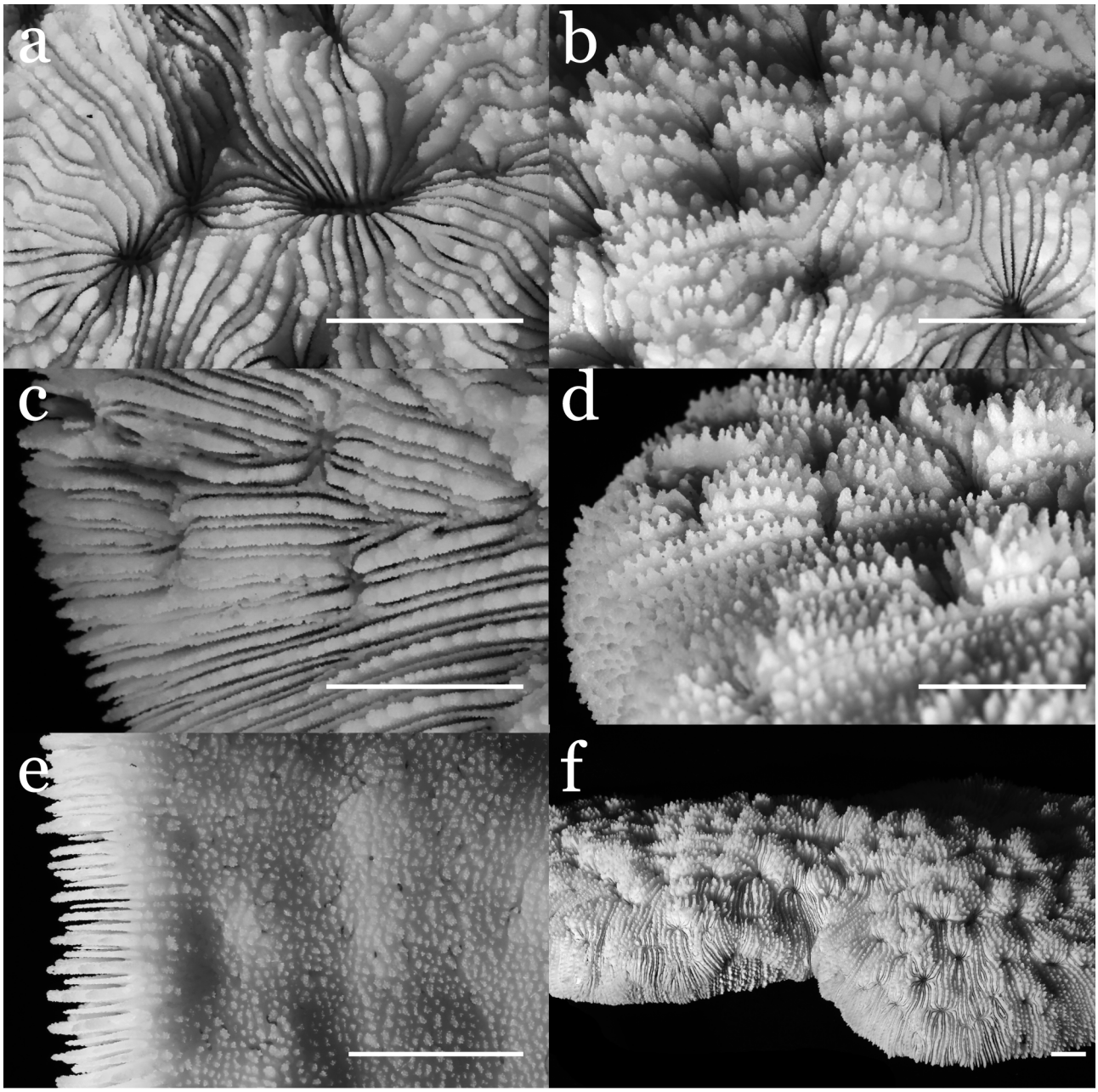



Fig. 7. *Sandalolitha robusta* (Quelch, 1886) (RUMF-ZG-4379, 223 mm long). a, primary stoma, its surrounding corallites and septa; b, septa around primary stoma, with ornamentation (teeth); c, septa near marginal part of corallum; d, septa near marginal part of corallum, with ornamentation (teeth); e, costae around marginal part of corallum; f, coenosteum and corallites. Scales = 10 mm.
図 7. ヘルメットイシ (RUMF-ZG-4379, 長さ 223 mm). a, 初口とその周辺のサンゴ個体と隔壁; b, 初口周辺の隔壁と隔壁上の鋸歯の状態; c, サンゴ体縁辺部の隔壁; d, サンゴ体周辺部の隔壁と隔壁上の鋸歯の状態; e, サンゴ体縁辺部の肋; f, 共骨部とサンゴ個体. スケール = 10 mm.

*S. dentata* tends to be distributed slightly away from the shore than *S. robusta*.

**Taxonomy and identification.** The genus *Sandalolitha* Quelch, 1884, currently contains four species, *S. dentata* Quelch, 1884 (type species), *S. robusta* (Quelch, 1886), *S. africana* Veron, 2000 (See Veron (2002) and ICZN (2011) for its authority), and *S. boucheti* Hoeksema, 2012. Adults of all four *Sandalolitha* species are free-living and polystomatous by circumstomadaeal budding (Hoeksema 1989: 187; 2012b: 437). The examined materials that are referred to as *S. dentata* by the present study have high and thick lower order septa and low and thin higher order septa that are alternately arranged, and the septa and costae each are arranged not as close as in other species. These conditions of *S. dentata* are more similar to *S. robusta* than to other congeners (Fig. 3; Hoeksema,

2012b). Hoeksema (1989; 2012b) distinguished *S. dentata* from *S. robusta* by the following characters: 1) teeth on upper margin of septum are longer and sharper, 2) lower order septa are more protruded perpendicularly, 3) secondary stomata are not produced by peripheral budding so the corallites are arranged more medially or along long axis, and 4) overall shape of the corallum is more elongated. These diagnostic characters are reexamined in the present study while taking size variations into consideration. The teeth on the septum tend to be triangular to distally rounded oblong shape in *S. robusta* and their shapes do not vary by the coralla size. In contrast, relatively large coralla of *S. dentata* have more triangular teeth and those of relatively small coralla are more sparsely arranged. It appears difficult to distinguish the two species by the degree of protrusion as the degree is variable by regions of even in a single corallum in both species. In *S. robusta*, septa between calices (especially lower order septa) protruded (Fig. 7b, d), and since the corallites are densely and evenly arranged all over the corallum (Fig. 5–7), calices appear to slightly immerse to the coenosteum (Fig. 7f). In *S. dentata*, septa (especially lower order septa) protruded at the outer margin of the calices (Figs. 3b, 4b) but not between calices, and since the density of corallites are low in general except for the center and long axis of the corallum (Figs. 1, 2, 8), calices appear to protrude from the coenosteum (Fig. 4f). In addition, the difference in the thickness of lower and higher order septa are more distinct in the center of coralla in both species. When similar-sized coralla of both species are compared, lower order septa of both medial and marginal regions of *S. robusta* are thicker than equivalent septa of *S. dentata* (Figs. 4a, b, 7a, b). *Sandalolitha dentata* also has differences in the thickness between lower and higher order septa that are larger in larger coralla (Figs. 3a, c, 4a, c), but those of *S. robusta* do not vary by the size of coralla.

It was also found that the number of corallites per corallum was distinctly smaller in *S. dentata* than in *S. robusta* (Fig. 8a). This difference is indeed immediately obvious (Figs. 1, 2, 5, 6). It is worth noting that the difference in the number of corallites between the two species can be more obvious when they are compared by the horizontal projection area of the corallum (Fig. 8a) than by the length (Fig. 8b).

Furtheremore, in *S. dentata*, septae, especially of lower order ones, protrude around the margin of the calice, and also due to low density of the corallites on the corallum, the calices appear to be produce from the coenosteum. However, in *S. robusta*, septae, especially of lower order ones, protrude on the coenosteum (i.e. outside calices), and the high density of the corallites on the corallum makes the calices slightly buried in the coenosteum. These valid diagnostic characters of the two *Sandalolitha* species recognized by the present study are summarized in Table 1.

Hoeksema (1989) examined many specimens of *S. dentata* and *S. robusta*, including the holotypes of the two species. The specimens of *S. dentata* and *S. robusta* studied in the present study agree well to the photographs shown in Hoeksema (1989: figs. 485–495, 497–506), with regard to the density and distribution of the corallites as well. These data warrant our identification.

Hoeksema (1989) considered Shirai's (1980: 532) record of *S. robusta* from Okinawa as *S. dentata* and listed it in the synonymy list of *S. dentata*. The photograph of Shirai (1980: 532) shows relatively large corallites in comparison with the corallum size, suggesting that the corallum is relatively small. The marginal region of the corallum has a small number of corallites, which is often observed in relatively small coralla of *S. robusta* (Fig. 6d). The corallites are not densely arranged along the long axis, and the septa of the corallum are relatively thick in general. Shirai (1980: 532) also recorded *Parahalomitra irregularis* (Gardiner, 1898), but it has been synonimised under *S. robusta* (Hoeksema, 1989).

Loya et al. (2009), who studied reproductive patterns of fungiid species, examined "*S. dentata*" from Sesoko Island. It has a typical distributional pattern of the corallites over the corallum (Loya et al. 2009: fig. 1bC), indicating that their "*S. dentata*" is *S. robusta* instead. Since "*S. robusta*" shown by Loya et al. (2009: fig 1bD) have densely distributed corallites around the center and high region and straight septa are arranged in an orderly manner marginally, it is possible that their "*S. robusta*" is *S. dentata* instead. Close examination of the corallum is, however, necessary to confirm these identities.

The present study proposes a standard Japanese name "Sandal-ishi" to *S. dentata*, alluding its general shape of the corallum. The specimen RUMF-ZG-4371 is designated as a standard specimen for this newly proposed Japanese name.

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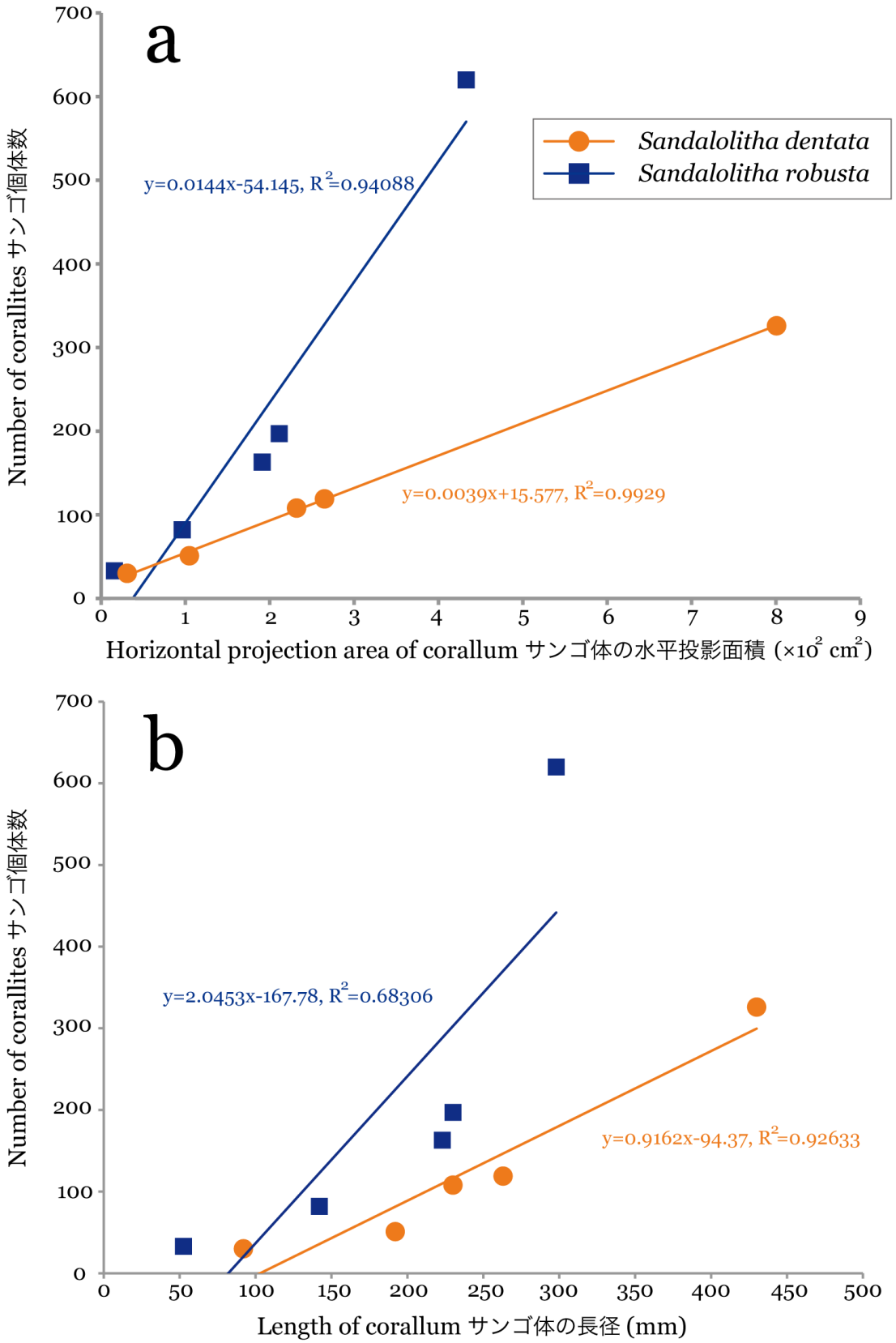


Fig. 8. Number of corallites on corallum of *Sandalolitha dentata* Quelch, 1884, and *S. robusta* (Quelch, 1886). Number of corallites are compared by horizontal projection area (a) and length (b) of coralla.
図 8. サンダルイシとヘルメットイシの，サンゴ体上のサンゴ個体数．両種のサンゴ個体数の比較を，水平投影面積 (a) と長さ (b) により行った．

Table 1 Diagnostic characters of *Sandalolitha dentata* Quelch, 1884, and *S. robusta* (Quelch, 1886).
表 1 サンダルイシとヘルメットイシの識別形質.

| | *S. dentata*<br>サンダルイシ | *S. robusta*<br>ヘルメットイシ |
|---|---|---|
| Distribution of corallites<br>サンゴ個体の分布 | More clustered distribution around center or along long axis (Figs. 1, 2).<br>より中心あるいは長軸近くに分布 (図. 1, 2). | Evenly distributed (Figs. 5, 6).<br>万遍なく分布 (図. 5, 6). |
| Density of corallites on corallum (see Fig. 8)<br>サンゴ個体の密度 (図 8 参照) | Low (Figs. 1, 2, 8).<br>低い (図. 1, 2, 8). | High (Figs. 5, 6, 8).<br>高い (図. 5, 6, 8). |
| Arrangement of calices and position of septal protrusion<br>莢の配置と隔壁の隆起場所 | Due to protrusion of septa (especially of lower order) around margin of calice but not on coenosteum and low density of corallites on corallum (Figs. 1, 2), calices appear protruded from coenosteum (Fig. 2).<br>隔壁 (特に低次隔壁) が莢外周で隆起するが, その外部では特に突出せず, またサンゴ個体の密度は低いため (図 1, 2), 莢が共骨部よりやや突出してみえる(図 2). | Due to protrusion of septa (especially of lower order) on coenosteum (Fig. 4b) and high density of corallites on corallum (Figs. 5, 6), calices appear slightly buried in coenosteum (Figs. 5, 6).<br>莢間の隔壁 (特に低次隔壁) が隆起し (図 4b), かつサンゴ個体がサンゴ体上に密に分布しているため (図 5, 6), 莢が共骨部よりも若干埋没してみえる (図 5, 6). |

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# サンダルイシ（新称）*Sandalolitha dentata* Quelch, 1884（イシサンゴ目: クサビライシ科）の西表島周辺からの記録，及びサンダルイシと近似種ヘルメットイシ *Sandalolitha robusta* (Quelch, 1886) の識別形質について

**成瀬貫[1]・上野大輔[2,3]・西平守孝[4]**

[1] 〒907-1541沖縄県八重山郡竹富町字上原870 琉球大学 熱帯生物圏研究センター 西表研究施設 (e-mail: naruse@lab.u-ryukyu.ac.jp)
[2] フロリダ大学 フロリダ自然史博物館 1659 Museum Rd., Gainesville, FL32611, U.S.A.
[3] (現所属) 〒890-0065 鹿児島県鹿児島市郡元 1-21-35 鹿児島大学大学院理工学研究科
[4] 〒905-0206 沖縄県国頭郡本部町字石川 888 一般財団法人沖縄美ら島財団 総合研究センター

**要旨.** 西表島周辺よりサンダルイシ(新称) *Sandalolitha dentata* Quelch, 1884 を記録した. 本報告で扱った最大の標本は, 比較的閉鎖的な水深約 20–40 m の, 礁斜面からなだらかな砂泥底に移行する境界の周辺より発見された. 本報告ではサンダルイシと, 形態的に最も似ており, また西表島でも同所的に見られるヘルメットイシ *S. robusta* (Quelch, 1886)の形態的特徴について再検討した. その結果, 両種はサンゴ体上におけるサンゴ個体の分布パタンとその密度などにより区別されたが, 低次隔壁, およびその上縁に並ぶ鋸歯の形状による識別は, 変異の大きさから困難であることが判明した.

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