

A Study on the Classification of the Korean Anthozoa
7. Scleractinia (Hexacorallia)

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韓國産 珊瑚蟲類의 分類에 관하여

7. 돌산호類 (六放珊瑚 亞綱)

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(Received March 20, 1982)

摘 要

한국산 六放珊瑚類의 계통분류학적 연구를 하기 위하여 1969년 12월부터 1981년 7월까지 남한의 16개 지역 (동해, 남해, 황해연안과 도서지방) 으로부터 채집된 표본들을 동정분류한 결과 다음과 같은 돌산호類에 속하는 5亞目 6科 11屬 17種을 얻었다. 이들은 모두 韓國未記錄種이며 다음과 같다.

Psammocora profundacella, *Alveopora japonica*, *Culicia japonica*, *Caryophyllia japonica*, *Cyathoceras niinoi*, *Heterocyathus aequicostatus*, *H. japonicus*, *Stephanocyathus (Odontocyathus) spiniger*, *Desmophyllum insignis*, *Flabellum distinctum*, *F. rubrum*, *F. transversale*, *Dendrophyllia boschmai*, *D. cribrosa*, *D. florulenta*, *Tubastraea aurea* 및 *T. coccinea*.

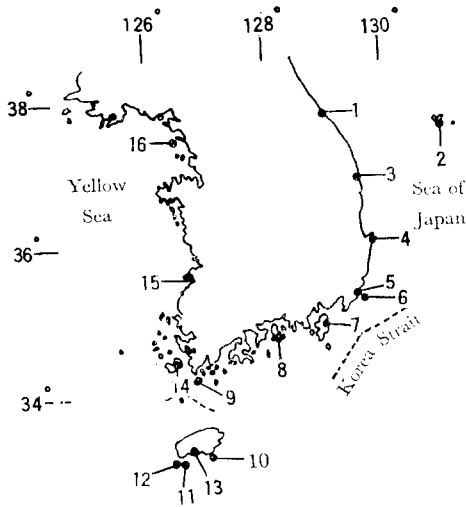
INTRODUCTION

The present investigation is the extensive work for faunistic and ecological accounts of the Korean Hexacorallia. Up to date, there has been a lack of knowledge of Korean scleractinian species.

The material consists of the specimens which have been collected from 16 localities in coastal waters of the South Korea for the period of 1969 through 1981 (text-fig. 1).

The stony corals (Scleractinia) identified in the present study turned out to be 17 species, six families and five suborders. They were all new to the Korean scleractinian fauna and thereby the author has briefly described each species with plate figures. A scale in the plate figures indicates one centimeter. Systematics are based upon Vaughan

& Wells (1943), Wells (1956) and Eguchi (1968).



1. Aninjin (安仁津)
2. Dodong (道洞)
3. Chugsan (丑山)
4. Guryongpo (九龍浦)
5. Mipo (尾浦)
6. Oryug I. (玉六島)
7. Geoje I. (巨濟島)
8. Sangjuri (尙州里)
9. Nowha I. (芦花島)
10. Supdo I. (林島)
11. Mundo I. (門島)
12. Beomdo I. (虎島)
13. Seogwipo (西歸浦)
14. Jindo I. (珍島)
15. Gomso
16. Jagyag I. (芍藥島)

Text-fig. 1. A map showing the localities where the material was collected from 1969 to 1981.

SYSTEMATIC DESCRIPTION

Order Scleractinia Bourne, 1900 돌산호 목

Suborder Astrocoeniina Vaughan & Wells, 1943 숲돌산호 아목

Family Thamnasteriidae Vaughan & Wells, 1943 덩어리돌산호 과

Genus *Psammocora* Dana, 1848 그물돌산호 속

1. *Psammocora profundacella* Gardiner, 1898 그물코돌산호

(Pl. 1, figs. 1-3)

Psammocora profundacella Gardiner, 1898, p.537, pl. 45, fig. 3; Yabe & Sugiyama, 1932, p. 164; 1935a, p.202; 1935b, p.397; Yabe, Sugiyama & Eguchi, 1936, p.60, pl. 45, figs. 1, 4, 5, 7, 8; Eguchi, 1935a, pp.28, 42; 1938, p.2020; 1968, p.C10, pl. C5, figs. 1, 2; Utinomi, 1971, p.224.

Material examined: Four fragments from Mundo I., Dec. 3, 1978.

Description: Corallum massive, 42 × 33 mm in width. Collines are low, rounded, enclosing several centers or series. Corallite small, slightly concave. Corallite walls absent, calicular boundaries sometimes marked by synapticular rings. Columella styliform. Septa with minutely dentate margins.

Distribution: Korea (South Sea), Japan (Southern Coast), Fanning Is., Andamans.

Suborder Fungiina Verrill, 1865 버섯돌산호 아목**Superfamily Poriticae Gray, 1842** 구멍돌산호 상과**Family Poritidae Gray, 1842** 구멍돌산호 과**Genus *Alveopora* de Blainville, 1830** 거품돌산호 속**2. *Alveopora japonica* Eguchi, 1968** 거품돌산호

(Pl. 1, figs. 4-6)

Alveora cfr. *verrilliana*: Yabe & Sugiyama, 1935a, pp.191, 195, 198, 206, 214; 1935b, pp.383, 389, 401; Eguchi, 1935a, p.45.

Alveopora japonica Eguchi, 1968, p. C19, pl. C1, figs. 1-2, pl. C3, figs. 1-2, pl. C7, figs. 1-11, pl. C26, figs. 4-5, pl. C29, figs. 4-5; Utinomi, 1971, p.211, pl. 11, figs. 4a, 4b.

Material examined: One specimen from Seogwipo, Oct. 19, 1973; one specimen from Seogwipo, Apr. 14, 1975; five specimens from Supdo I., Apr. 15, 1975; 11 specimens from Supdo I., Feb. 14, 1976; 19 specimens from Supdo I., Feb. 15, 1976; 10 specimens from Mundo I., Dec. 3, 1978; one specimen from Seogwipo, July 12, 1979; two specimens from Seogwipo, Aug. 2, 1979.

Description: Corallum massive, egg-like form, 72 × 52 mm in diameter and 58 mm in height at the largest. Corallites perforate, reticulate and polygonal in outline. Calices are 3.0~7.0 mm in diameter, contact with thin shieved wall. Center of calice is distinct, by radial arrangement of spiny septa. No columella. At a living state, a calice has 12 long tentacles, uniformly green.

Distribution: Korea (South Sea), Japan (Sagami Bay, Tanabe Bay, Kyushu, Kamae Bay, Aosima, Ryukyu Is., Noto Peninsula).

Suborder Faviina Vaughan & Wells, 1943 벌집돌산호 아목**Superfamily Faviicae Gregory, 1900** 벌집돌산호 상과**Family Rhizangiidae d'Orbigny, 1851** 근생돌산호 과(=*Astrangiidae* Verrill, 1869)**Genus *Culicia* Dana, 1848** 흑돌산호 속**3. *Culicia japonica* Yabe & Eguchi, 1936** 흑돌산호

(Pl. 1, figs. 7-9)

Culicia japonica Yabe & Eguchi, 1936, pp.167-168, figs. 1-3; 1942a, p.128; Eguchi, 1968, pp. C26-27, pl. C9, figs. 1-3.

Material examined: One specimen between Supdo I. and Mundo I., Feb. 8, 1971; Many specimens from Supdo I., Apr. 15, 1975.

Description: Reptoid corallum. Colonies united by the thin calcarous pertheca. Corallites cylindrical, small, 3.0~4.5 mm in diameter, 2.5~5.0 mm in height. Corallite walls are heigher than septal margin. Calices circular, with a peripheral groove between the wall of calice and the outer margin of septa. Septa thin, lateral granulation, marginal dentation, 36-44 in number, with those of the fourth. Columella well developed, papillated

on top. At the living state, Calices are yellowish orange in color.
Distribution: Korea (South Sea), Japan (Sagami Bay).

Suborder Caryophylliina Vaughn & Wells, 1943 정향돌산호 아목

Superfamily Caryophylliicae Gray, 1847 정향돌산호 상과

Family Caryophylliidae Gray, 1847 정향돌산호 과

Subfamily Caryophylliinae Gray, 1847 정향돌산호 아과

Genus *Caryophyllia* Lamarck, 1801 정향돌산호 속

4. *Caryophyllia japonica* Marenzeller, 1888 정향돌산호

(Pl. 2, figs. 3-4)

Caryophyllia japonica Marenzeller, 1888, p. 16; Eguchi, 1941,

p. 1186; 1968, pp. C31-32, pl. C11, figs. 4-6, 10-29, pl. C23, figs. 7-9; pl. C25, figs. 5-6, pl. C29, figs. 6-7; Yabe & Eguchi, 1942a.

Caryophyllia ephyala Alcock, 1902, p. 9; Yabe & Eguchi, 1932a, p. 388.

Material examined: Three specimens from Aninjin, Aug. 4, 1971; Three specimens from Guryongpo, Dec. 24, 1974; six specimens from Mipo, July 15, 1974; seven specimens from Mipo, May 12, 1974; one specimen from Mipo, Apr. 25, 1975; four specimens from Dodong (Ulreung I.), July 14, 1976; seven specimens from Dodong, July 16, 1976; nine specimens from Mipo, Dec. 6, 1978; 12 specimens from Mipo, May 15, 1980; 17 specimens from Mipo, Aug. 2, 1980.

Description: Solitary, turbinate to subcylindrical. In the largest specimen, calice is rather, circular 9.0×8.5 mm in diameter, 20 mm in height. In septa, the first two cycles slightly exsert above the rim of calica, those of the third and fourth cycle are complete. 12 pali are situated at the front of third cycle. Columella formed by curled trabecular laths, 2.0×1.5 mm in size.

Distribution: Korea (South Sea, Sea of Japan), Japan, Philippines, Banda Sea, Indian Ocean (Andamans, Laccadive Is., Seychelles, Providence, Saya de Malha),

Genus *Cyathoceras* Moseley, 1881 컵돌산호 속

5. *Cyathoceras niinoi* Yabe & Eguchi, 1942 니노컵돌산호

(Pl. 2, figs. 1-2)

Cyathoceras niinoi Yabe & Eguchi, 1942a, pp. 117, 145-146, pl. 9, figs. 9a, 9b.

Material examined: Two specimens from Mipo, July 15, 1974.

Description: Solitary, conical, being broadest slightly below truncated calice. The small pedicle expand at base to form a large encrustine film. The largest specimen is 15 mm in height, 10×10.5 mm in diameter of calice, 8 mm in diameter of pedicle. Septa are arranged in 5 complete cycle, 96 in number. Septa of first two cycle exsert above the margin of calice, 1.0~1.5 mm high, subequal in size. Calicular fossa is very deep, 3 mm in depth. Columella oblong, papillary. Pali absent. Corallite wall and septa granulated.

No costae.

Distribution: Korea (South Sea), Japan (Husa-maru).

Genus *Heterocyathus* M. Edw. & H., 1848 이형컵돌산호 속

6. *Heterocyathus aequicostatus* M. Edw. & H., 1848 이형컵돌산호

(Pl. 2, figs. 7-9)

Heterocyathus aequicostatus M. Edw. & H. 1848, p. 321, pl. 10, fig. 8; Yabe & Eguchi, 1932b, p. 443; 1942a, p. 127, pl. 11 (3), figs. 2-5; Sakakura, 1935, pp. 185-186; Eguchi, 1938, p. 2020; 1941, p. 1187; 1968, pp. C36-37, pl. C28, fig. 1, pl. C29, figs. 8-9; Vaughan & Wells, 1943, pp. 30, 207, 333; Wells, 1956, p. F424.

Material examined: One specimen from Mipo, Apr. 4, 1975; one specimen from Gomso (Byeonsan Peninsula), June 11, 1975; many specimens from Jagyag I., Nov. 15, 1976; two specimens from Geoje I., July 22, 1978; one specimen from Jagyag I., Apr. 7, 1980; one specimen from Mipo, Aug. 2, 1980.

Description: Solitary, cylindrical, attached with an expanded base. The largest specimen is 10 mm in height, 10×6 mm in diameter of calice, 8×6 mm wide in the middle part of pedicle. First large septa exert above the margin of calice. Septa following the Pourtales's plan, marginal dentation. Columella papillose, papillae margin with the pali which stand before all septal cycles. No epitheca. Costae distinct, being continued over the base as a series of granulations.

Distribution: Korea (Yellow Sea, South Sea), Japan, China Sea, Taiwan, Philippines, Indonesia, Ceylon, Persian Gulf, South Africa.

7. *Heterocyathus japonicus* (Verrill, 1866) 일본이형컵돌산호

(Pl. 2, figs. 10-11)

Stephanoseris japonica Verrill, 1866, p. 47.

Stephanoseris carthausi: Makiyama, 1926, p. 5; Sakakura, 1935, p. 189.

Heterocyathus japonicus Yabe & Eguchi, 1942a, pp. 127-128, pl. 11 (3), fig. 6; Eguchi, 1968, p. C37, pl. C4, fig. 1, pl. C27, figs. 12-14.

Material examined: Two specimens from Mipo, Nov. 6, 1976, one specimen from Oryug I., Apr. 28, 1978.

Description: Solitary, basal expansion fixed on the shell. Specimens are 2-3 mm in height, 5.5×5.0-6.5×7.0 mm in diameter. Septa show the deltoid groups of Pourtales's plan. Wall and septa perforated, no epitheca. Costae distinct, alternating in size, being continued over the base.

Distribution: Korea (South Sea), Japan, Taiwan, Java.

Genus *Stephanocyathus* Seguenza, 1864 관컵돌산호속

Subgenus *Odontocyathus* Moseley, 1881 긴다리돌산호 아속

8. *Stephanocyathus* (*Odontocyathus*) *spiniger* (Marenzeller, 1888) 긴다리돌산호
(Pl. 4, figs. 1-2)

Stephanotrochus spiniger von Marenzeller, 1888, p. 20.

Odontocyathus sexradis Alcock, 1902, p. 23, pl. 3, figs, 20, 20a-b.

Odontocyathus sp. Alcock, 1902, p. 24.

Odontocyathus stella Alcock, 1902, p. 24, pl. 3, figs. 21, 21a-b.

Odontocyathus spiniger: Eguchi, 1941, p. 1188; 1968, pp. C39-40, pl. C23, figs, 1, 2, pl. C20, figs. 12-14; Yabe & Eguchi, 1942a, pp. 124-125 (20-21), pl. 10(2), figs. 26a-c, 27a-c, 28a-b.

Stephanocyathus (*Odontocyathus*) *spiniger*: Utinomi, 1965, p. 254.

Distribution: Two specimens from Seogwipo (100 m depth), May 22, 1971.

Description: Solitary, simple, six-legged, saucer-shaped corallum. The specimen is 24 mm in diameter, 15 mm in height to summit of the exsert primary septa, 8 mm in length of rootlet. Septa cycle are largest, and the fourth cycle unite with the third cycle before the columella. Pali present, opposite the three cycle of septa. Columella large, 6 mm in diameter, consist of a tubercular mass of contorted papillae. Cestae distinct, bearing granulation on the radiating legs and bowl.

Distribution: Korea (South Sea), Japan, East Indies.

Subfamily Desmophyllinae Vaughan & Wells, 1943 나팔꽃돌산호 아과

Genus *Desmophyllum* Ehrenberg, 1834 나팔꽃돌산호 속

9. *Desmophyllum insignis* (Duncan, 1876) 나팔꽃돌산호

(Pl. 2, figs. 5-6)

Javania insignis Duncan, 1876, pp. 435-436, pl. 39, figs. 11-13.

Desmophyllum insignis: Eguchi, 1941, p. 1187; 1968, pp. C41-42, pl. C9, figs. 4-6; Yabe & Eguchi, 1942a, p. 115(11), pl. 9(1), figs. 5-6.

Material examined: Six specimens between Supdo I. and Mundo I. (60 m depth), Feb. 2, 1971; two specimens from Supdo I., Feb. 2, 1971; one specimen from Seogwipo, Dec. 26, 1971; nine specimens from Seogwipo, Aug. 18, 1973; four specimens from Seogwipo, Aug. 19, 1973; Two specimens from Seogwipo, Aug. 20, 1973.

Description: Solitary, trochoid, fixed. Corallum are 24-38 mm in height, expands gradually, being compressed. Calice elliptical, 16.5×12-28×21 mm in diameter. The septa is four cycle of which the larger twelve septa are equal, thick, smooth and approach the long-axis space. Columella and pali absent.

Distribution: Korea (South Sea), Japan (Sagami Bay, Mie-ken), Red Sea.

Superfamily Flabellicae Bourne, 1905 부채돌산호 상과

Family Flabellidae Bourne, 1905 부채돌산호 과

Genus *Flabellum* Lesson, 1831 부채돌산호 속

10. *Flabellum distinctum* M. Edw. & H., 1848 부채돌산호

(Pl. 3, figs. 1-4)

Flabellum distinctum M. Edw. & H., 1848, p. 262; Alcock, 1902, p. 30; Yabe & Eguchi, 1932a, p. 387; 1932b, p. 443; 1942a, pp. 130-130; 1942b, pp. 93-95; Eguchi, 1938, p. 1188; 1944, pp. 132-134; 1968, p. C44, pl. C22, figs. 2, 3, 6, 7, pl. C25, figs. 7, 8, pl. C28, figs. 5, 6; Utinomi, 1965, p. 255.

Material examined: One specimen from Seogwipo, Dec. 13, 1969 (young form); one specimen from Seogwipo, Dec. 15, 1969; one specimen from Beomdo I., Feb. 7, 1971 (60 m depth); four specimens from Seogwipo, Feb. 9, 1971; four specimens from Seogwipo, Dec. 25, 1971; three specimens from Seogwipo, Oct. 19 1973; one specimen from Seowipo, Oct. 20, 1973 (young form); one specimen from Seogwipo, Apr. 12, 1975; one specimen from Seogwipo, Oct. 1, 1978.

Description: Corallum wedge-shaped, compressed, 28-41 mm in height, usually triangular in side view, with a short cylindrical pedicle. The forms vary in the edge angles between 95° and 120°. Lateral faces are plane, with curved accretion lines, angles 30°-35°. Calices are oval in adult, from 34×18 mm to 49×26 mm, and spindle shaped in young form, sharpened at both ends. Septa 182 in complete specimen of which 24 principal septa extend to columella. In one young form, septa 58 in number of which 12 is principal septa. Columella deep-seated at bottom of narrow, elongate fossa, formed trabecular process of inner margin of principal septa.

Distribution: Korea (South Sea), Japan (Sagami Bay, Kei Is.), Widespread in all warm seas of Atlantic, Pacific and Indian Oceans.

11 *Flabellum rubrum* (Quoy & Gaimard, 1833) 쇠기부채돌산호

(Pl. 3, figs. 7-8)

Turbinolia rubra Quoy et Gaimard, 1833, p. 188, pl. 14, figs. 13-14.

Flabellum rubrum: Yabe & Eguchi, 1932b, p. 443; 1942a, pp. 131-132, pl. 11(3), figs. 13-14; 1942b, pp. 96-98, pl. 8(4), figs. 6-30; Eguchi, 1938, p. 2020; 1941, pp. 1186-1188; 1968, p. C45-46, pl. C25, figs. 1, 2, 9; Utinomi, 1965, p. 256.

Material examined: One specimen from Seogwipo, Feb. 13, 1971 (100 m depth); one specimen from Seogwipo, Dec. 23, 1971.

Description: Corallum conical or wedge-shaped, compressed, 33-34 mm in height, with a distinct scar below 4×3.5 mm. Edge angle 40°-50° and facial angle 28°-30°. Calice oval, 26×18 mm wide in small form and 34×20 mm wide in larger form. Calicular fossa 14-17 mm deep, almost a half of total height. Septa thin, finely granulated on lateral surface, 90 and 96 in number of which 22 or 24 principal septa extend to columella. Columella deep-seated, formed of trabecular process of inner margin of principal septa.

Distribution: Korea (South Sea), Japan, China Sea, Philippines, New Zealand, Indian Ocean.

12. *Flabellum transversale* Moseley, 1881 횡주름부채돌산호

(Pl. 3, figs. 5-6)

Flabellum transversale Moseley, 1881, p. 174, pl. 6, figs. 6, 6a; Yabe & Eguchi, 1932b, p. 443; 1942a, pp. 134-135; 1942b, pp. 99-100, pl. 6, fig. 11, pl. 7, figs. 1-6, 9, 12; Eguchi, 1941, pp. 1186-1188; 1968, pp. C46-47, pl. C20, figs. 8-9.

Flabellum dens Alcock, 1902, p. 32, pl. 4, figs. 30, 30a.

Flabellum inconstans v. Marenzeller, 1904, pp. 277-280, pl. 17, fig. 11.

Material examined: 22 specimens from Mipo, May 15, 1980; 12 specimens from Oryug I., Aug. 2, 1980.

Description: Corallum elongate, conical, 35~55 mm in height, strongly compressed, with rounded surface and without lateral ridge. Edge angle 30° ~ 40° , more obtuse near base, up to 50° . Faces usually even, showing transverse growth rings, and 20° in the facial angle. Calice oval, its margin slightly irregular, 22×17 mm wide in small form and 38×20 mm wide in larger form. Calice fossa deep, almost one third of total height. All septa covered with abundant fine pointed granule, 124 in number in the 38 mm high specimen of which 24 principal septa extend to trabecular columella.

Distribution: Korea (Korea Strait), Japan, Philippines, Australia, New Zealand.

Suborder Dendrophyllina Vaughan & Wells, 1943 나무돌산호 아목

Family Dendrophylliidae Gray, 1847 나무돌산호 과

Genus *Dendrophyllia* Blainville, 1830 나무돌산호 속

13. *Dendrophyllia boschmai* van der Horst, 1926 보슈마나무돌산호

(Pl. 4, figs. 3-4)

Dendrophyllia japonica van der Horst, 1922, p. 51, pl. 7, fig. 6.

Dendrophyllia boschmai van der Horst, 1926, p. 44; Eguchi, 1934, p. 367; 1935a, p. 1; 1935b, p. 404; 1941, p. 1187; 1968, pp. C56-57, pl. C15, figs. 4, 7, pl. C16, figs. 3, 4, pl. C17, figs. 12, 15, pl. C30, fig. 1.

Material examined: One specimen from Seogwipo, Dec. 15, 1969; one specimen from Seogwipo, Aug. 11, 1970; one specimen from Seogwipo, Dec. 25, 1971.

Description: Corallum arborescent, with thick branches in all directions. The largest colony is 170 mm in height, 215 mm in width, 52 mm in thickness. Main stem is 26×24 mm in thickness, above the enlarged base. Corallites on the branches arranged in two rows. On some branches they are crowded, giving the fan-shaped branch. On the main stem, secondary calices have developed at the front and backside of primary calices. Calicles are elliptical, 9×8.5 ~ 13×11 mm in diameter in the stem and 5×4.5 ~ 8×7 mm on the branches. The arrangement of septa is shown in the diagram (van der Horst, 1922, fig. 3). Calicular fossa 4~5 mm deep, columella projecting, 2×1 ~ 4×1 mm in diameter, consisting of a sponge network.

Distribution: Korea (South Sea), Japan (Sagami).

14. *Dendrophyllia cribrosa* M. Edw. & H. 1860 유착나무돌산호

(Pl. 3, figs. 9-10)

Dendrophyllia cribrosa M. Edw. & H., 1860, p.235; van der Horst, 1922, p.104 (52), pl. 7, fig. 2; Eguchi, 1935b, pp.402-404, fig. 1; 1968, pp. C58-59, pl. C2, fig. 2, pl. C21, figs. 3, 4; Yabe & Eguchi, 1944, pp.135-136, pl. 7(4), fig. 4.

Dendrophyllia ramiculosa: Eguchi, 1934, p.367.

Material examined: Five fragments from Jindo I., Aug. 2, 1974; one specimen from Sangjuri (Namhae I.), Aug. 28, 1980; one specimen from Nowha I., July 20, 1981; many fragments from Chugsan I., July 26, 1981.

Description: Corallum arborescent, anastomosis, irregularly branching, 300 mm in height, 450 mm in diameter, 300 mm in thickness in the largest specimen (from Sangjuri). Branches are thick, cylindrical, 21×16 mm thick in basal part, 18×16 mm in middle part, 6×5 mm in twig. Calice circular, 4.5~6 mm in diameter, very little projecting. Septa arranged pentamerous, with rudimentary septa of the 4th cycle near wall. Costae distinct, intercostal groove is larger and much perforated. Calicular fossa 2~3 mm deep. Columella scanty, formed of paliform bulge.

Distribution: Korea (South Sea, Sea of Japan), Japan (Southern Coast).

15. *Dendrophyllia florulenta* van der Horst, 1922 꽃나무돌산호

(Pl. 4, figs. 5-6)

Dendrophyllia florulenta van der Horst, 1922, p.106 (54), pl. 7, fig. 5; Wells, 1954, p.473, pl. 180, figs. 4-5.

Dendrophyllia cf. *fluolenta*: Eguchi, 1934, p.367; 1968, p.C59.

Material examined: Two specimens from Seogwipo, Dec. 27, 1971.

Description: Corallum dendroid, branched characteristically in one plane. Corallites are alternately situated in the same plane, budding near the calicular margin. The colony is 60 mm high 48 mm wide, seems to consist of a zigzag stem with the calices. Calice oval, 5.5×5.5~11×7.5 mm in diameter. The septa are prominently exerted and their arrangement is shown in the diagram (van der Horst, 1922, fig. 6). Columella not projecting, 2×1~3×1.5 mm in diameter, consisting of a trabecular network.

Distribution: Korea (South), Japan, Malay Archipelago, Bikini Atoll.

Genus *Tubastraea* Lesson, 1834 나팔돌산호 속**16. *Tubastraea aurea* (Quey & Gaimard, 1833) 금빛나팔돌산호**

(Pl. 3, figs. 11-12)

Lobephyllia aurea Quey & Gaimard, 1833, p.390, pl. 14-25.

Dendrophyllia willeyi van der Horst, 1922, p.108 (56), pl. 8, figs. 17, 18.

Dendrophyllia aurea: Eguchi, 1934, p.367; 1938, p.2015.

Tubastraea aurea: Searle, 1956, pp.11, 24, pl. 11, 24, pl. 38B; Utinomi, 1965, pp.257-

258; 1971, pp.220-221; Eguchi, 1968, pp.C68-70, pl. C16, figs. 5~6, pl. C17, fig. 17, pl. C26, figs. 2-3.

Material examined: Two specimens from Mundo I., Dec. 3, 1978.

Description: Corallum forming cluster, 17~25 mm in height, $24 \times 16 \sim 23 \times 13$ mm in diameter.

Corallites cylindrical, calice oval, 12×10 mm in diameter. Budding takes place near the calicular margin. Wall of corallite is thin, perforated, covered with rough granulation.

Septa in 4 cycles, the fourth are imperfectly developed, very thin and uneven. Calicular fossa 6-7 mm deep. Columella well developed, slightly oval, $2 \times 1 \sim 5 \times 2$ mm in diameter.

At the living state, calices are orangish red.

Distribution: Korea (South Sea), Japan, West Atlantic, Indo-Pacific.

17. *Tubastraea coccinea* (Hemprich & Ehrenberg) 진홍나팔돌산호

(Pl. 4, figs. 7-8)

Oculina coccinea H. et E. in Ehrenberg, 1834, p.80.

Dendrophyllia ehrenbergiana van der Horst, 1922, p.55, pl. 7, fig. 3-4.

Dendrophyllia coccinea: Utinomi, 1965, p.257.

Tubastraea coccinea: Utinomi, 1954, p.106; 1971, p.221; Eguchi, 1968, pp.C70-71, pl. C2, fig. 3, pl. C14, Fig. 4, 5, 8, 9.

Tubastraea coccinea titijimaensis Eguchi, 1968, p.C71, pl. C17, Fig.16, pl. C31, Figs. 1-4.

Material examined: One specimen from Seogwipo, Dec. 26, 1971; one specimen from Seogwipo, Oct. 18, 1973.

Description: Corallum incrusting, 55~63 mm in height, 70~75 mm in width, 58~73 mm in thickness. Corallite are placed symmetrically in regard to the initial corallite. Corallite subturbinate, calice circular or oval, $6.5 \times 6.5 \sim 15 \times 12$ mm in diameter. Septa with 4 cycles complete and in some systems some of 5th cycles are developed. The arrangement of septa is shown in the diagram (van der Horst, 1922, Fig. 7). Columella oblong, $3 \times 1.2 \sim 6 \times 3$ mm in diameter, spongy in texture.

Distribution: Korea (South Sea), Japan (Southern Coast), Marshall Is., Ambon, Maldives, Red Sea.

SUMMARY

A systematic study of Korean stony corals was done with specimens from 16 localities in the coastal seas of Korea for the period of 1969 through 1981.

The scleractinians identified in the present study turned out to be 17 species, 11 genera, six families and five suborders. They were all new to the Korean scleractinians fauna: *Psammocora profundacella*, *Alveopora japonica*, *Culicia japonica*, *Caryophyllia japonica*, *Cyathoceras niinoi*, *Heterocyathus aequicostatus*, *H. japonicus*, *Stephanocyathus* (*Odontocyathus*) *spiniger*, *Desmophyllum insignis*, *flabellum distinctum*, *F. rubrum*, *F. transversale*, *Dendrophyllia boschmai*, *D. cribrosa*, *D. florulenta*, *Tubastraea aurea* and *T. coccinea*.

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EXPLANATION OF PLATES

Plate 1 (3, 6, 9: ×16)

- Figs.** 1- 3. *Psammocora profundacella* Gardiner, 1898 그물코돌산호
Figs. 4- 6. *Alveopora japonica* Eguchi, 1968 거품돌산호
Figs. 7- 9. *Culcia japonica* Yabe & Eguchi, 1936 혹돌산호

Plate 2 (9, 11: ×16)

- Figs.** 1- 2. *Cyathoceras niinoi* Yabe & Eguchi, 1942 니노킵돌산호
Figs. 3- 4. *Caryophyllia japonica* Marenzeller, 1888 정향돌산호
Figs. 5- 6. *Desmophyllum insignis* (Duncan, 1876) 나팔꽃돌산호
Figs. 7- 9. *Heterocyathus aequicostatus* M. Edw. & H., 1848 이형킵돌산호
Figs. 10-11. *Heterocyathus japonicus* (Verrill, 1866) 일본이형킵돌산호

Plate 3 (10: ×16)

- Figs.** 1- 4. *Flabellum distinctum* M. Edw. & H., 1848 부채돌산호
 Figs. 1- 2. adult form; Figs. 3-4. young form.
Figs. 5- 6. *Flabellum transversale* Moseley, 1881 횡주름부채돌산호
Figs. 7- 8. *Flabellum rubrum* (Quoy & Gaimard, 1833) 췌기부채돌산호
Figs. 9-10. *Dendrophyllia cribrata* M. Edw. & H., 1860 유착나무돌산호
Figs. 11-12. *Tubastraea aurea* (Quoy & Gaimard, 1833) 금빛나팔돌산호

Plate 4 (6: ×16)

- Figs.** 1-2. *Stephanocyathus (Odontocyathus) spiniger* (Marenzeller, 1888) 긴다리돌산호
Figs. 3-4. *Dendrophyllia boschmai* van der Horst, 1922 보슈마나무돌산호
Figs. 5-6. *Dendrophyllia florulenta* van der Horst, 1922 꽃나무돌산호
Figs. 7-8. *Tubastraea coccinea* (Hemprich & Ehrenberg) 진홍나팔돌산호

Plate 1

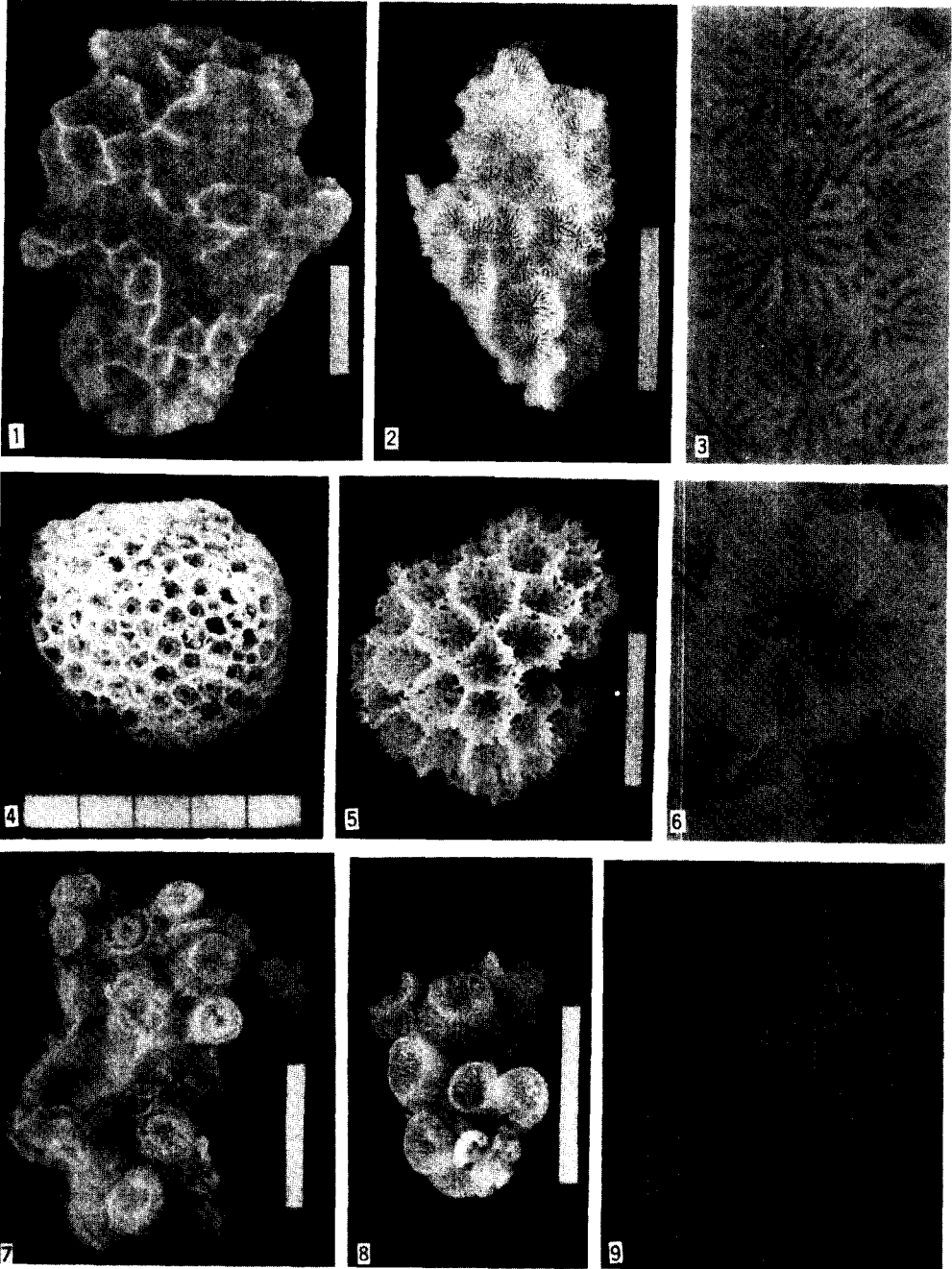


Plate 2

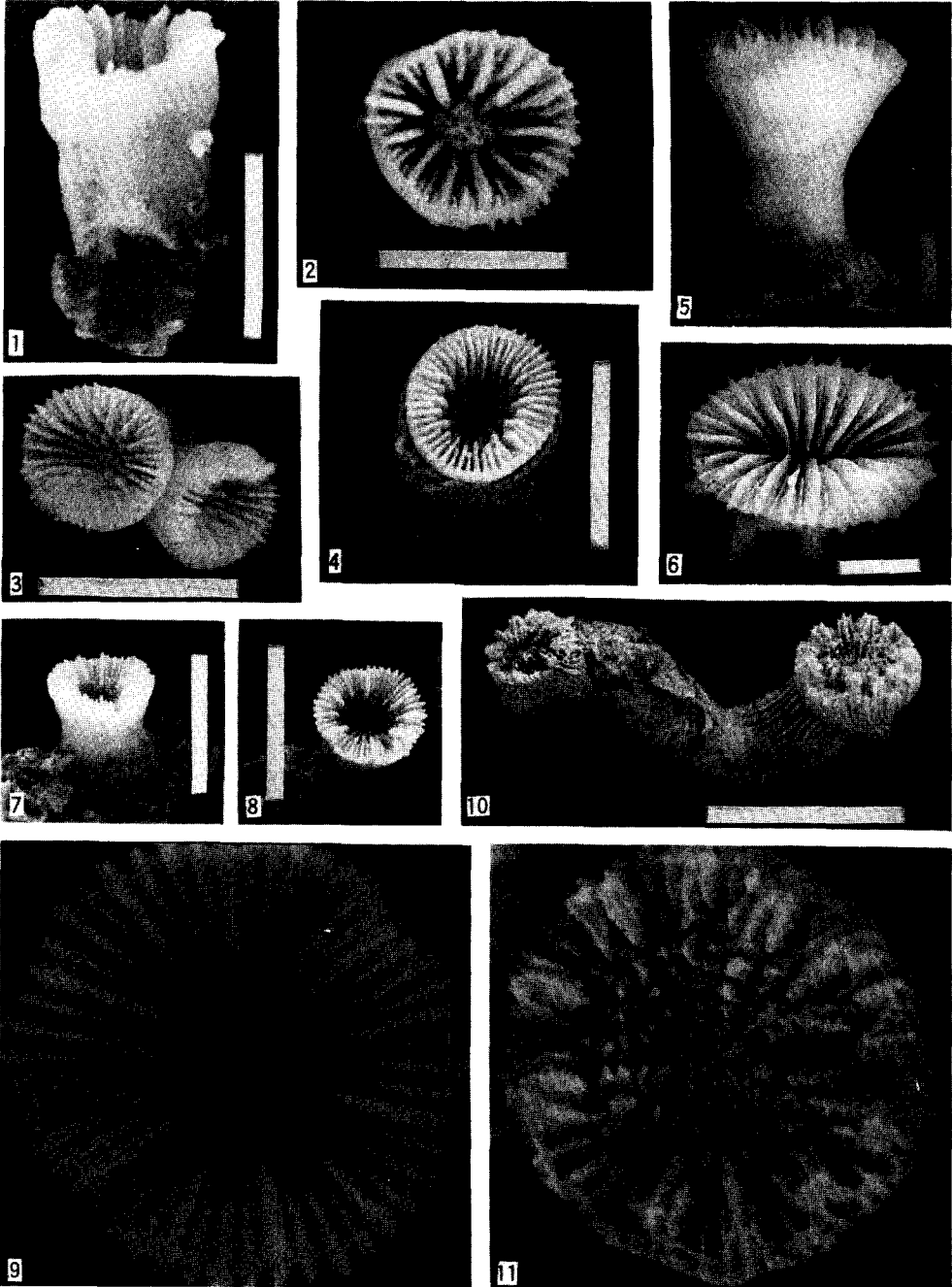


Plate 3

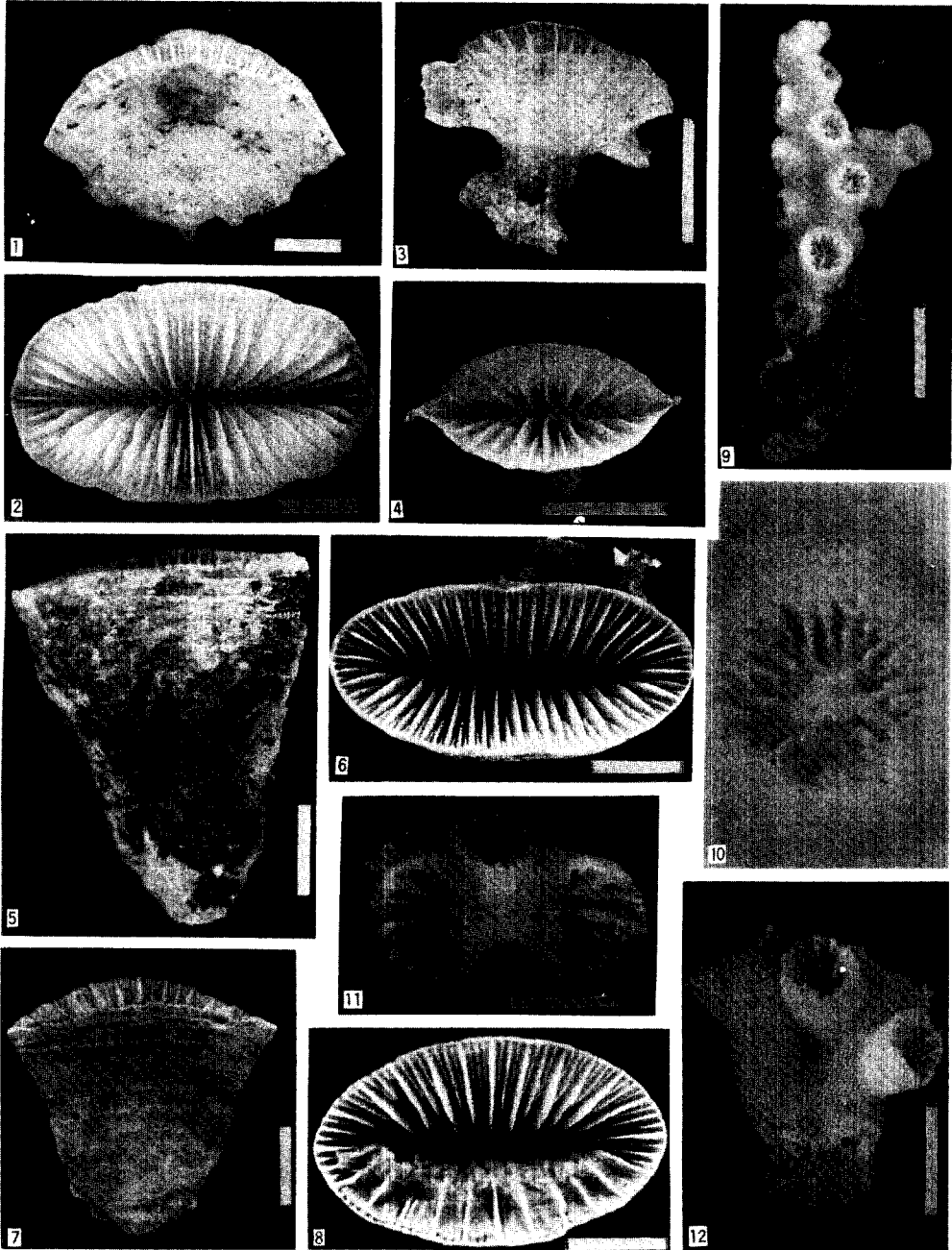


Plate 4

