Notes on Indo-Pacific Scleractinian Corals, Part 3 A New Reef Coral from New Caledonia

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IN 1957 Dr. R. L. A., Catala of the Station de Biologie Marine, Nouméa, New Caledonia, discovered the brilliant fluorescence in ultraviolet light of the polyps of reef corals living in deeper waters (see, Nature 1(83): 949, 1959; Life 47(3): 64-65, 1959; 26 franc postage stamp of New Caledonia issued March 21, 1958). Dr. Catala kindly sent the writer a collection of these corals, together with photographs of many of them living in the Aquarium de Nouméa. The specimens came from a depth of 35-40 m. on Banc Gail, in the lagoon of Nouméa about 10 mi. from the Aquarium, and were collected by Dr. Yves Merlet, for whom the new species described below is named. The scleractinian fauna includes these species:

Montipora caliculata (Dana) M. verrucosa (Lam.) Goniopora lobata Milne Edwards & Haime Favia speciosa (Dana) Favites abdita (Ellis & Solander) Platygyra lamellina (Ehrenberg) Echinopora hirsutissima M. E. & H. Trachyphyllia geoffroyi (Audouin) Galaxea fascicularis (Linn.) Bantamia merleti sp. nov. Cynarina lacrymalis (M. E. & H.)² Protolobophyllia japonica Yabe & Sugiya ma^2 Lobophyllia corymbosa (Forskaal) L. hemprichi (Ehrenb.) Symphyllia recta (Dana) Mycedium elephantotus (Pallas) Euphyllia picteti Bedot³

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Plerogyra sinuosa (Dana)

² These two species will be the subject of a subse-

quent note.

FAMILY OCULINIDAE SUBFAMILY GALAXEINAE

GENUS Bantamia Yabe & Eguchi 1943

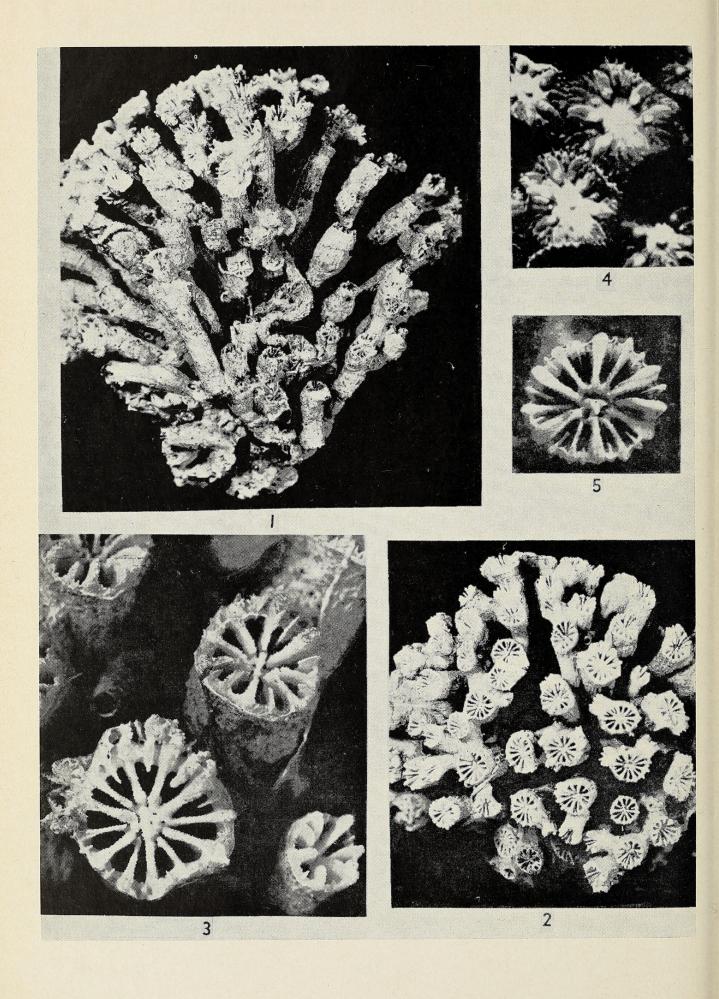
Bantamia merleti sp. nov. Figs. 1-4

Corallum fasciculate, 10 cm. in height, 10 cm. broad (holotype), formed by cylindrical corallites, 5-7 mm. in diameter, 4-7 mm. apart, arising by extratentacular budding from a very narrow edge-zone near the calices, at first subhorizontal, then becoming erect and subparallel and losing organic connection with parents. Exterior of corallites costate only near calices, epithecate below, completely lacking any exothecal structures. Calices circular or slightly compressed, 5-7 mm. in diameter, shallow. Septa exsert 1-1.5 mm. near the wall, dropping to low inner lobes near the columella. Septal margins thickened where exsert, nondentate but finely granulated, the granulations extending down septal sides where they are evenly distributed. Septa of first two cycles (12) equal and extending to columella; a few very thin, short septa of the third cycle developed in some systems. Costae weakly developed by narrow edge-zone near calices; in some corallites the edge-zone is not developed and the wall appears epithecal. Columella formed by interlaced loose trabecular processes from inner margins of septa, with one to three granulate papillae arising in bottom of the calice and commonly having a sublamellar aspect. Endotheca consisting of widely spaced, deeply concave single vesicles, the latest ones about 5 mm. below bottom of calice.

Polyps pale brown with pale yellow-green peristomes. Peristomes fluorescing a pale emerald green, the remainder a pale orange-brown.

The reference of this species to Bantamia is fairly certain on the basis of Yabe and Eguchi's careful description of the unique specimen of B. gerthi from the Miocene deposits of Java. B. merleti, also known from a unique specimen, lacks the feeble development of vesicular exo-

³ Photographs by Dr. Catala of the living coralla of this species show an exact similarity, including color, between its polyps and those of Pectinia jardinei Saville-Kent (1893: 39; 1958: pl. 25, fig. 3, and chromo pl. 4, fig. 7) from the northern part of the Great Barrier Reef, and this form probably should be termed Euphyllia jardinei (Saville-Kent). E. picteti was originally described from Amboina by Bedot and has been reported by the writer (1955: 26) from Port Newry, Queensland.





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