A record of *Anomalops katoptron* from Hachijo Island

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A few years ago, Dr. S. HATAI (formerly Director of the Palao Tropical Biological Station at Korror, Palau or Pelew Is.) expressed before a meeting of the former staff members of that station his desire to establish a new biological station somewhere on a Japanese island in order to continue biological studies on tropical or subtropical organisms. Since then the situation has become gradually improved, and recently Dr. HATAI and Prof. K. HIDAKA (Dept. of Geophysics, Tokyo Univ.) have succeeded in gathering some ten scientists who wished to make biological and oceanographical investigations at Hachijo I. (Hachijo-jima or Hachijo-shima) (Fig. 1). Aided by a grant from the Ministry of Education, they (including the present writer) are now engaged in these researches, although no biological station has as yet been built on the island. The present paper is the first of a series of papers dealing with the fishes from the island, and it is his duty and pleasure to acknowledge here the debt which he owes to the Ministry of Education, Mr. T. ARAYA (Japan Associatiion for the Promotion of Scientific Research), Mr. I. GENSHO (Director of Tokaiku Suisan Kenkyujo), Dr. S. HATAI, Prof. K. HIDAKA, Prof. Y. K. OKADA (Zoological Institute, Faculty of Science, Tokyo Univ.), Dr. I. TAKI (Tokaiku Suisan Kenkujo) and Prof. M. UDA (Tokyo Fisheries College, formerly Director of Tokaiku Suisan Kenkyujo). Through their kindness and generosity the writer has been able to visit the island and study on the Hachijo fishes at the Hachijo Branch of Tokaiku Suisan Kenkyujo, Tokaiku Suisan Kenkyujo and Zoological Institute, Faculty of Science, Tokyo University.

The fish reported upon herein is the remarkable *Anomalops katoptron* (BLEEKER), of which, so far as the writer is aware, but a single record has hitherto been published from Japanese seas (ABE, 1942). On December 16, 1914, Mr. Kitaro OZAWA (Kan-minato, Mitsune-mura, Hachijo I.) presented to the Primary School of Mitsune-mura a fresh specimen of this species which was taken by himself on hook and line near Kan-mintao probably on that day. Judging from the informations contained in his talk, the fish seems to have been taken from a depth of some 300 m or shallower water. He remembers that the fish had luminous parts. The specimen has heen lent to the writer for examination through courtesy of that school. As his esteemed colleague, Dr. Y. HANEDA, is going to revisit the island to continue his extensive studies on bioluminescence, the writer hastens to report on the occurrence of this fish from the sea near Hachijo Island, in the hope that further knowledge might be obtained there by Dr. HANEDA concerning this remarkable fish.

The specimen measures *ca**. 200 mm. in total length (measured to the vertical through caudal tips). The following measurements are expressed in hundredths of the standard length (measured to the posterior end of vertebral column), *ca*.* 155 mm. Length of head *ca.* 34; greatest depth of body *ca.* 38; greatest width of body (at the posterior end of head) *ca.* 21; least depth of caudal peduncle *ca.* 11; length of snout *ca.* 6; diameter of eye *ca.* 14; bony interorbital *ca.* 12.

D_1. V, **D_2.** I+14 (=i+13, all the soft rays segmented; the last ray bifid to the base). **A.** II+10 (all the rays segmented and branched; the last ray bifid to the base). **V.** left as well as right. I (segmented) +5 segmented and branched). **P.** left as well as right. 18 (=ii+14+ ii, all the rays segmented). **C.** (viii) (the lowermost ray long) /9/1/8/ (viii) (the uppermost ray long).

Pseudobranchiae well developed; branchiostegal rays 8 on each side; gill-rakers on the 1st arch 7/1/23 on each side.

Scales irregularly arranged, extending on the bases of caudal, dorsal and anal fins; pored scales in lateral line *ca.* 60; keeled scales between vent and the base of ventral fin 18. Posterior rim of orbit with a row of 9–10 fleshy papillae, which increase in size ventrally. Subocular luminous organ fits in a deep crescentic cavity. The bones forming the surface of skull and shoulder girdle finely striated. Teeth on jaws and palatines minute; none on vomer.

Color in alcohol: Brownish; soft dorsal and anal darker, with a paler longitudinal band proximally. Subocular cavity and the one side of luminous organ black, the other side of the latter pale.

* The specimen is twisted.

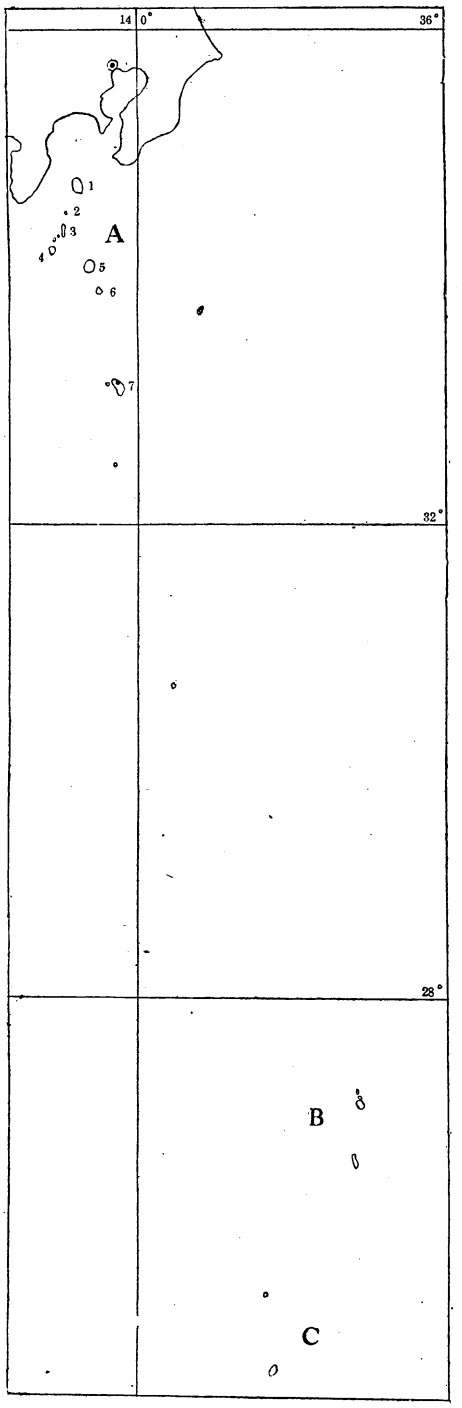

Fig. 1. Sketch map of Izu-shichito, Bonin Is. and Volcano Is. ◉: Tokyo. A: Izu-shichito (1, Oshima; 2, Toshima; 3, Nii-jima 4, Kozu-jima; 5, Miyake-jima; 6, Mikura-jima; 7, Hachijo-jima(or Hachijo-shima). ●: Kanminato. B: Bonin Is. C:Volcano Is.

REFERENCES

The publications referred to in the previous paper mentioned below (ABE, 1942) will be omitted.

ABE, T. 1942. A record of *Anomalops katoptron* (BLEEKER) from Japan. Annot. Zool. Japon., xxi, no. 1, pp. 55–57.

The following papers and book have been kindly loaned to the present writer by Dr. HANEDA. The writer wishes to express here his thanks to Dr. HANEDA for his kindness. In these publications the lumin ousorgan of *Ano malops* is treated of.

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