

NOTES ON LITTLE-KNOWN JAPANESE FISHES WITH
DESCRIPTION OF A NEW SPECIES OF ABOMA.

By DAVID STARR JORDAN and HENRY W. FOWLER,
Of the Leland Stanford Junior University.

In overhauling the Japanese collections of Jordan and Snyder a few specimens have been found which had been overlooked in the reviews of different families already published. Notes on these, giving additional features or additional localities, are here presented.

Family ANGUILLIDÆ.

ANGUILLA JAPONICA Schlegel.

Two small specimens from the Yodo River in Osaka.

Family LEPTOCEPHALIDÆ.

LEPTOCEPHALUS NYSTROMI Jordan and Snyder.

A single specimen from Morioka in Oshima, Hokkaido, differs but little from the type.

Head $1\frac{1}{2}$ in trunk; head and trunk $1\frac{1}{2}$ in tail; mouth reaching middle of eye; eye about $4\frac{1}{2}$ in head; lower jaw included; snout cavernous, $3\frac{2}{3}$ in head; eye about $1\frac{1}{6}$ in snout; pectoral about 3 in head; dorsal inserted before middle of pectoral; gill-opening below pectoral, and the space between its upper margin and origin of dorsal, when viewed laterally, about $5\frac{2}{3}$ in head; tail ending in a point.

The color has almost entirely faded except the brownish-black margin of the ventral fin posteriorly. Total length $14\frac{1}{2}$ inches (368 millimeters).

Family APOGONIDÆ.

SYNAGROPS JAPONICA (Döderlein).

Head $2\frac{1}{6}$; depth $3\frac{3}{4}$; depth of caudal peduncle $3\frac{3}{4}$ in head; interorbital space 4; snout a little over 4; maxillary 3. D. IX-I, 9; A. II, 7; squamation injured.

Body rather oblong, back not elevated; caudal peduncle compressed; head compressed laterally, almost as deep as body and with the upper profile straight; snout convex; occiput rather flattened, interorbital space convex and about three-fourths diameter of eye; eye large, greater than snout; preorbital narrow, its greatest width one-third eye; snout rounded obtusely, convex above, lower jaw projecting; maxillary reaching first third of eye, its posterior edge concave; upper jaw with 2 or 3 large sharp canines; lower jaw with 2 pairs of median canines and 5 lateral canines, the posterior of the latter the largest; both jaws with their edges finely roughened; vomer with a patch of small teeth; palatines with small teeth; tongue pointed, without teeth, and free in front; gill-rakers rather long, 3+13 on the first arch; pseudo-branchiæ large; edge of preopercle with fine denticulations; branchiostegals 7; head, except lips and branchiostegal region, covered with small scales; many pores above and on jaws.

First dorsal spine about one-fourth length of second, inserted close to it; fourth spine longest, the others progressively shorter to the last, which is about equal to first; fin, when depressed, fitting into a narrow groove but its tip not reaching base of soft dorsal; spine of soft dorsal close to first ray, the fin in advance of the anal, so that the origin of the latter falls about under its middle; pectorals longer than ventrals and with their tips reaching origin of soft dorsal; ventrals directly below pectorals and pointed; caudal emarginate, the lobes distinct. Color entirely faded in alcohol. Length 104 millimeters.

This description from a single specimen dredged by the U. S. Fish Commission steamer *Albatross* in Suruga Bay.

The name *Melanostoma* being preoccupied, Dr. Günther has suggested *Synagrops* as a substitute.¹

Family TETRAODONTIDÆ.

SPHEROIDES OCELLATUS (Osbeck).

A single small specimen, 36 millimeters long, from the Yodo River, Osaka. The black ocelli are joined by a black band across the shoulders.

EUMYCTERIAS RIVULATUS (Schlegel).

We have specimens from Okinawa and from Totomi Bay, the latter dredged by the U. S. Fish Commission steamer *Albatross* at Station 3729.

Family GOBIIDÆ.

ODONTOBUTIS OBSCURUS (Schlegel).

One specimen from Lake Yogo, in Mino, above Lake Biwa.

¹ Rept. Fishes Challenger, 1887, p. 16.

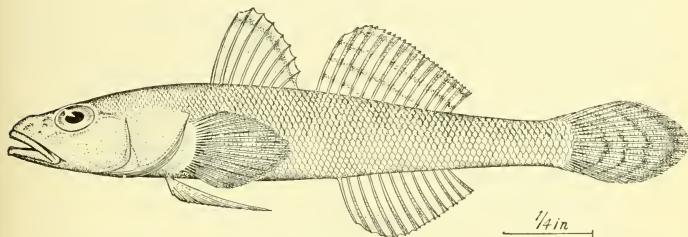
CTENOGOBIOUS SIMILIS (Gill).

One example from Kumashiro.

ABOMA SNYDERI Jordan and Fowler, new species.

Head 3; depth 5; depth of caudal peduncle 4 in head; eye 4 in head; snout 3; maxillary 3. D. VII or VIII-14; A. 12; scales about 56 in a lateral series, in a transverse series about 16.

Body rather elongate, gradually tapering backwards; head wider than body, but less deep, the sides rather compressed; snout blunt, rounded when viewed laterally, and truncately rounded when viewed from above; eyes high in head, anterior, and very close together, directed upwards, the interorbital space very narrow and concave; jaws subequal; mouth large, the maxillary reaching eye; space between lower margin of orbit and posterior edge of maxillary less than eye; tongue broad, its edge rounded anteriorly, free in front; teeth in villiform bands in the jaws, with an outer enlarged series;



ABOMA SNYDERI.

gill-openings rather large, the isthmus broad. Head naked, except the upper portion of the opercles, which are covered with small scales; scales on the nape very small. Dorsal fins separate from each other and from the caudal; first dorsal spine the longest, the others progressively smaller, when depressed, not reaching origin of soft dorsal; dorsal rays, when depressed, falling far short of base of caudal; anal inserted a little behind soft dorsal and falling a little below second or third ray; anterior rays of soft dorsal and anal the longest, the posterior not much elongated or produced; pectoral rather larger, and, when depressed, reaching origin of soft dorsal; ventrals rather long, but shorter than the pectorals, free posteriorly.

Color in alcohol, pale brown, darker above, very pale below; on the upper surface everywhere with small, indistinct, darker spots and reticulations; side with a series of rather large dark blotches; spinous dorsal pale, marked with 4 or 5 narrow, blackish brown, longitudinal bands; soft dorsal of similar color and also marked with about 4 lon-

itudinal, blackish-brown bands; a black spot upon the upper part of the spinous dorsal posteriorly; anal, pectorals, and ventrals pale; a dark spot on the base of the pectorals above; caudal pale, with about 4 vertical, broad, blackish-brown bars.

Four specimens were taken in a little pond in Aomori.

Type No. 7193, Ichthyological Collections, Leland Stanford Junior University Museum. Cotypes are in the U. S. National Museum.

(Named for John O. Snyder, curator of fishes, Stanford University.)

Measurements of Aboma snyderi.

Total length in millimeters.....	33	45	47	49.
Total length without caudal.....	26	36	37	38
Depth.....	5	7	7	8
Head.....	9	12	13	13
Eye.....	2	3	3	3
Snout.....	2.5	4	4	4
Interorbital space.....	.5	1	1	1
Length of pectoral.....	6	8	8	8
Dorsal spines.....	VIII	VII	VIII	VIII
Dorsal radii.....	14	14	14	14
Anal radii.....	12 ²	12	12	12
Pectoral rays.....	21	21	20	20

This species is very close to *Aboma breunigi* (Steindachner), agreeing with it more or less in color, but differing from it and the other species of the genus in the greater number of soft dorsal rays and the scaly opercles.

CHÆNOGOBIUS MACROGNATHOS (Bleeker).

Yodo River in Osaka.

CHASMICHTHYS MISAKIUS Jordan and Snyder.

We have three examples from Wakanoura.

The generic name *Chasmias* being preoccupied, Jordan and Snyder have substituted *Chasmichthys* for it.

TRIDENTIGER OBSCURUS (Schlegel)

Two large specimens from the Kitakami River.

TRIDENTIGER BUCCO Jordan and Snyder.

One specimen from Tamagawa at Tachikawa.

TRIDENTIGER BIFASCIATUS Steindachner.

Specimens from Wakanoura.