

DESCRIPTION OF *EUBRANCHUS INABAI* N. SP., FROM
MUKAISHIMA, JAPAN (NUDIBRANCHIA-EOLIDOIDEA)¹⁾

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With 1 Text-figure

The author is grateful to Dr. Akihiko INABA who has kindly allowed him to examine two specimens (one living and the other preserved) of a new species of *Eubbranchus* collected from the vicinity of the Mukaishima Marine Biological Station attached to the Hiroshima University. The descriptive accounts run as follows:

Eubbranchus inabai n. sp.

Inaba-minoumiushi (n. n.)

Holotype: Length (Code Ac) 6 mm in the living state. Body rather stoutish. Tail long and narrowed, but ends bluntly. Rhinophores simple. Branchial papillae on back-margins arranged in 5 simple oblique rows, about 3 in the 1st, 4 in the 2nd, 2-3 in the 3rd, and 2 in the 4th and 5th, the foremost two rows presumably belonging to the right liver (and the left partner), the papillae themselves short fusiform and swollen in the mid-length. Liver diverticulum within each of the papillae simple. Genital orifice immediately below the middle of the right liver rows. Acleiproctic anus closely in front of the inner corner of the post-anal row, nephroproct not determined. Foot-corners rounded. Back and sides deep reddish brown, a series of opaque white markings on the back in the median line, that marking covering the pericardial prominence being the largest. Mid-length of the cephalic tentacles reddish brown. Head above opaque white. Sides of head reddish brown, and this colour extends upward to the bases of the rhinophores. Branchial papillae covered with opaque white dots on the upper half, their veins (=liver diverticula) dark brown above and reddish below.

Holotype locality: Mukaishima, Inland Sea of Seto, Japan.

Date of collection: Mar. 21, 1962 (coll. by Dr. INABA).

1) Contributions from the Mukaishima Marine Biological Station, No. 78.

Paratype: Preserved, length 3 mm. Jaw-edge with a series of about 15 blunt denticles. Radula formula $85 \times 1.1.1$. Central tooth with a median cusp and 2 lateral denticles on each side. Lateral teeth broad and plate-like. Jaw-plates and radula faintly yellowish. Penis not determined.

Paratype locality: Same as the holotype.

Date of collection: Mar. 4, 1960 (coll. by Dr. INABA).

Remarks: It has been argued by LEMCHE (1964) to adopt *Eolis farrani* ALDER & HANCOCK, 1845 (1844) as the type of *Eubbranchus* FORBES, 1838. The generic

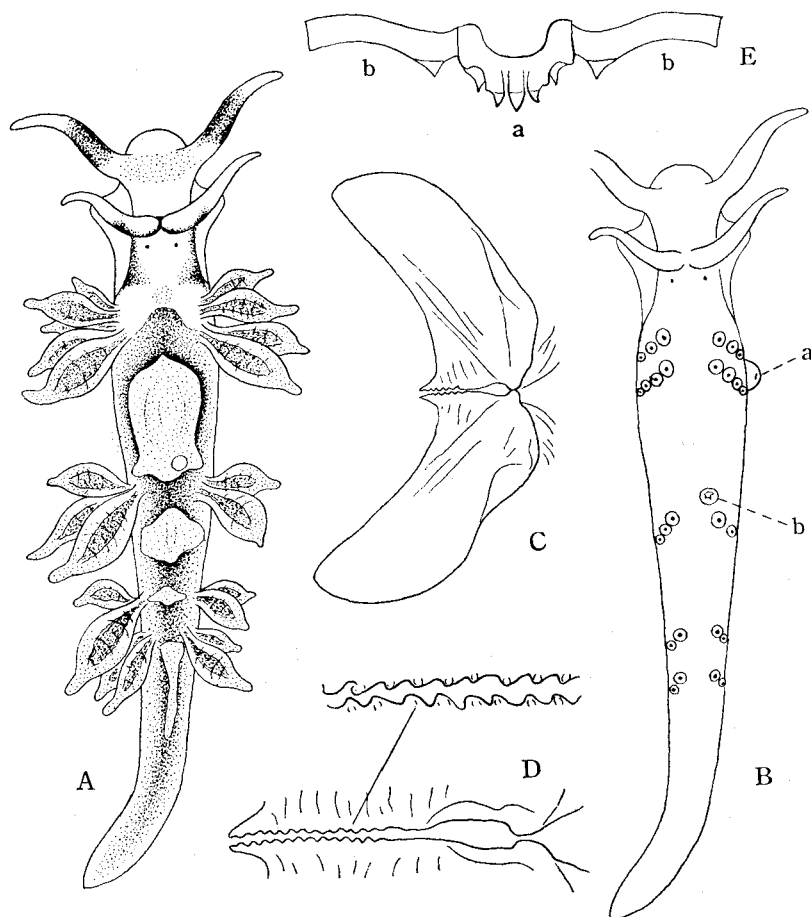


Fig. 1. *Eubbranchus inabai* from Mukaishima, Inland Sea of Seto, Japan. A-B. Holotype; C-E. Paratype. A. Entire animal in life, length (Code Ac) 6 mm. B. External features of the body, a. genital orifice, b. anal papilla. C. Paired jaw-plates from outside ($\times 30$). D. Denticulations of the jaw-edge ($\times 100$). E. A transverse row of radula teeth ($\times 300$), a. central tooth, b. lateral teeth.

characters, though not completely, are fairly well-known to-day (see ODHNER, 1939, pp. 53, 63; LEMCHE, 1964, p. 41), and *horii* BABA, 1960 may possibly be taken in its organization as one of the representative members of *Eubranchus* (in *horii* a stylet is present at the tip of the conical, muscular penis). A new species, *inabai*, is here added to the same genus. Seemingly it resembles most closely *E. agrius* MARCUS, 1959, in the arrangement of the branchial papillae, but differs from the latter in the shape of the central teeth. Contrary to these statements, the species *misakiensis* BABA, 1960 has been revealed to disagree with *Eubranchus* in many respects (angulated foot-corners, liver diverticulum with a boss in the mid-length, exceedingly elongated penis gland, formation of a false penis, absence of a stylet, thick development of glandular tissue on the outer wall of the penis sheath). Presumably this species is ought to be transferred to a separate genus not recorded previously. *Eubranchopsis virginalis* BABA, 1949 forms undoubtedly a distinct species. But it shows the general structure of the genitalia found in usual species of *Eubranchus*, and has a very small stylet on the muscular penis. It is the author's private intention to give, some day or other in the future, fuller accounts on the comparative anatomy of a series of species, *Eubranchus horii*, *E. (?) misakiensis* and *Eubranchopsis virginalis*.

Note: Two more specimens of *E. inabai* have been obtained from Nomo near Nagasaki in a tide pool covered by hydrozoans (Mar. 28, 1964, collector Mr. K. MATSUBAYASHI).

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