A new species of anchovy, *Encrasicholina macrocephala* (Clupeiformes: Engraulidae), from the northwestern Indian Ocean

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Abstract

A new species of anchovy, *Encrasicholina macrocephala*, is described on the basis of 17 specimens collected from the Red Sea and the Arabian Sea. The species is closely related to *E. devisi* in that both species have three unbranched rays in the dorsal and anal fins, and a long upper jaw (posterior tip extending beyond posterior margin of preopercle). However, the new species is distinguished from *E. devisi* in having lower counts of total pectoral-fin rays (11–14 vs. 13–15) and pseudobranchial filaments (15–18 vs. 18–22), longer head length (29.5–31.7% of standard length vs. 25.4–28.9% in the latter), upper-jaw length (21.3–23.5% vs. 14.6–21.3%), and lower-jaw length (19.5–21.2% vs. 14.2–19.5%), and a shorter distance between the dorsal-fin origin to the pectoral-fin insertion (83.2–95.2% of head length vs. 97.6–126.1%).

Key words: Teleostei, new species, *Encrasicholina devisi*, Red Sea, Arabian Sea

Introduction

*Encrasicholina* Fowler 1938 is a genus of small-sized anchovies (60–95 mm standard length) inhabiting marine and/or estuarine waters in the Indo-Pacific (Whitehead *et al.* 1988). The genus has five valid species with members characterized by having a short isthmus muscle not reaching anteriorly to the posterior margin of the gill membrane, an exposed urohyal, in having prepelvic scutes, and by lacking postpelvic scutes (Whitehead *et al.* 1988; Wongratana *et al.* 1999).

During a revisionary study of *Encrasicholina*, we found 17 unidentified specimens of an engraulid fish from the Red Sea and off the Sultanate of Oman characterized by having a large head. The specimens are described here as a new species of *Encrasicholina*.

Material and methods

Counts and proportional measurements generally followed Kimura *et al.* (2009) and Hata *et al.* (2012). D–P1, D–P2, and D–A were measured as straight line distances from the dorsal-fin origin to: the pectoral-fin insertion; the pelvic-fin insertion; and the anal-fin origin, respectively. P1–P2 is the straight line distance between insertions of the pectoral and pelvic fins. P2–A is the straight line distance from the pelvic-fin insertion to the anal-fin origin. All measurements were made with digital calipers to the nearest 0.01 mm. Osteological characters were examined from radiographs of the holotype and seven paratypes of the new species and 13 specimens of *Encrasicholina devisi*. Standard and head lengths were abbreviated as SL and HL respectively. Institutional codes followed those listed in Sabaj Pérez (2010). Counts and measurements, expressed as percentages of SL or HL, are given in Tables 1 and 2 respectively. Frequency distribution of counts of the branched pectoral-fin rays and pseudobranchial filaments are given in Table 3.
References


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