

# On the morphology of the digestive system of *Latiaxis* (*Babelomurex*) (Gastropoda, Coralliophilidae) with notes on the phylogeny of the family

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Anatomy of the digestive system of two species of *Latiaxis* (*Babelomurex*), *L. naskensis* and *L. sentix*, was studied for the first time. Digestive system is similar in details to that of *Coralliophila*, described by Ward [1965] and possess several unusual and unique characters: absence of the radula and odontophore; joining the paired salivary ducts in their anterior portion in a single one, opening in buccal tube dorsally; passing of the salivary ducts outside the walls of oesophagus; structure of the gland of Leiblein. These characters delimitate Coralliophilidae from Muricidae at least at familiar level. The hypothesis about secondary elongation of the proboscis has been proposed.

## К морфологии пищеварительной системы *Latiaxis* (*Babelomurex*) (Gastropoda, Coralliophilidae) с заметками по филогении семейства

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Впервые исследована анатомия пищеварительной системы двух видов *Latiaxis* (*Babelomurex*) — *L. naskensis* и *L. sentix*. Пищеварительная система очень сходна с таковой *Coralliophila*, описанной Дж.Вардом [Ward, 1965] и характеризуется несколькими необычными или уникальными признаками: отсутствием радулы и одонтофора; слиянием парных слюнных протоков в их передней части в непарный, открывающийся в буккальную трубку дорсально; тем, что слюнные протоки следуют отдельно от стенок пищевода по всей их длине; структурой железы Лейблейна. Эти признаки отличают Coralliophilidae от Muricidae по крайней мере на уровне семейства. Высказана гипотеза о вторичном удлинении хобота Coralliophilidae.

### INTRODUCTION

Coralliophilidae are a relatively small family, comprised of about 200 species [Kosuge, Suzuki, 1985]. The family has a remarkable association of its shallow-water representatives with living corals. Some of the genera are boring (e.g. *Leptoconchus*, *Magilus*, *Reliquiacava*), some free-living (*Coralliophila*, *Coralliobia*, *Quoyula*, etc.). Ecology of deep-water

species is unknown. Since the shells and general anatomy of unmodified members of the family closely resemble those of some Muricidae, both families were usually considered to be closely related [Ponder, 1973, Fig. 4]. In their classification of Caenogastropoda, Ponder and Warén [1988] considered Coralliophilidae as a subfamily of Muricidae.

Although systematics and species composition of this family have been discussed in