

Morphological development of *Pellona flavipinnis* post-yolk-sac larvae and juveniles (Clupeiformes: Pristigasteridae)

WILLIAM SEVERI* & NELSY F. VERANI**

*Laboratório de Ictiologia, Departamento de Pesca e Aqüicultura, Universidade Federal Rural de Pernambuco, Rua Dom Manoel de Medeiros, Dois Irmãos, 52171-900, Recife, PE, Brazil. wseveri@ufrpe.br

** Departamento de Hidrobiologia, Universidade Federal de São Carlos, Rod. Washington Luiz, km 235, 13565-905, São Carlos, SP, Brazil. dnfverani@power.ufscar.br

Abstract

Pristigasterids are predominantly coastal marine sardines of tropical and subtropical seas, with some species being found in fresh water. Two species of the genus *Pellona*, *P. castelnaeana* Valenciennes, 1847 and *P. flavipinnis* (Valenciennes, 1837), inhabit fresh waters of the neotropical region, with the latter occurring in the Pantanal of Mato Grosso, in the Paraguay River basin of central Brazil. The development of *P. flavipinnis* larvae and early juveniles was characterized from an ontogenic series of 27 specimens (6.3–35 mm SL), based on morphological and meristic characters. The larval and juvenile development of this freshwater sardine are typical of most clupeiforms. Exact hatching size is unknown, but it is less than 6 mm standard length (SL) and the yolk is absorbed under 10 mm. Transformation to the flexion stage occurs at about 11 mm, to the postflexion stage between 16 and 19 mm, and to the juvenile stage after 26 mm. The ventral scutes begin to form between 25 and 31 mm, with the full complement of scutes (32 to 37) formed between 32 and 35 mm. Total myomere count averages 42. As the dorsal fin and origin of the anal fin and vent migrate anteriorly, the preanal myomere count ranges from 29 in the flexion larvae to 24 in early juveniles up to 35 mm. Corresponding preanal lengths range from 85 to 61%, respectively.

Key words: Clupeiformes, Pristigasteridae, *Pellona flavipinnis*, larvae, development, Pantanal, Neotropical

Resumo

Pristigasteridae é uma família de sardinhas de ambientes marinhos costeiros, predominantemente de mares tropicais e subtropicais, com algumas espécies de água doce. Duas espécies do gênero *Pellona*, *P. castelnaeana* Valenciennes, 1847 e *P. flavipinnis* (Valenciennes, 1837), habitam águas doces da região neotropical, sendo que a última ocorre no Pantanal de Mato Grosso, bacia do rio Paraguai, Brasil Central. O desenvolvimento de larvas e juvenis iniciais de *P. flavipinnis* foi caracterizado a partir de uma série ontogênica de 27 exemplares (6,3–35 mm CP), com base em