

## Morfologia e aspectos da ecologia comportamental de cercárias parasitas de *Pomacea lineata* (Spix, 1827) (Mollusca, Ampullariidae)

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**Abstract.** Morphology and aspects of behavioral ecology of parasite cercariae of *Pomacea lineata* (Spix, 1827) (Mollusca, Ampullariidae). The aim of this survey was to study the morphology, morphometry and the behavioral ecology of the cercariae that parasitizes the mollusk *Pomacea lineata*. Collections of 120 molluscs were made in ditches from a plantation, from Barreira do Triunfo, Juiz de Fora, MG. Part of the mollusks were dissected and part were kept in plastic dishes. For the morphometric description, 30 cercariae collected in water and 30 collected in the digestive gland were measured. Different methodologies were used to elucidate where the metacercariae develops. To make the experimental infection of the definitive host, we used three chicks (*Gallus gallus*). To verify if light influences the emergence of the cercariae, the mollusks were divided into two groups: one was exposed in the continuous light for 48 hours and the other stayed in the darkness for 48 hours. To verify if the temperature influences the emergence of the cercariae, the mollusks were kept at three different temperatures: 18°C, 25°C and 32°C, for 48 hours. The longevity of the cercariae was tested in the three different temperatures above. To study the digenean populations we registered the prevalence, intensity, mean intensity, mean abundance and density. The dispersion index was calculated to determine the distribution patterns of the parasite infrapopulation. The degree of dispersion was calculating the K factor. The cercariae that were found are xiphidiocercariae. The development of metacercariae in *Aedes aegypti* larvae was observed. The chicks did not get infected. The cercariae examined in this study emerge both in the dark and in the light; however, they emerge significantly more in the dark. With regard to the cercariae response and longevity in the different temperatures, we observed that the temperature of 25°C seems to be the optimum temperature for the cercariae of this digenean species. The prevalence of infection was 33.33%, the mean intensity was  $10,638.18 \pm 8,423.91$  cercariae/infected host, the mean abundance was  $3,543.06 \pm 6,972.58$  cercariae/infected host. The density varied from 258 to 29,500 cercariae/gr of the digestive gland. The female mollusks are more parasitized than the males. The dispersion index was 13,721.72 and the K factor was 0.26, indicating an aggregated distribution pattern of the cercariae population.

**Keywords:** *Pomacea lineata*, xiphidiocercariae, behavioural ecology.