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ABSTRACT

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Octopicolids are minute copepods, difficult to discern to the naked eye or with a poor stereoscope, that were described to live in exclusive association with octopuses. Originally, they were placed within the Lichomolgidae Kossman, 1877, a big family of poecilostomatoid copepods consisting, mainly, of associates of marine invertebrates. However, their systematic position at the family level was controversial since the beginning. Moreover, in the description of the first species known to science, i.e. *Octopicola superba* Humes, 1957, some important morphological differences were recognized between that species and other species of lichomolgids. The higher systematics of octopicolids was revised in 1996 by Humes and Boxshall. At that time, they erected the family Octopicolidae to accommodate all the taxa known

to date, arguing that the female members of this new family diverged from those within all other families of the lichomolgid complex in retaining the primitive 6-segmented condition of the urosome. Unfortunately, the identification key of Humes and Stock for the genus *Octopicola*, dating of 1973, was not updated so far, though another species, that is, *O. regalis*, was described only 1 year after its publication. Indeed, other morphological characters besides the ones considered by Humes and Stock seem valuable in distinguishing between different species. These

additional differences are the total body length, the shape of the genital somite, the length:width ratio of the caudal ramus and the female reproductive investment (egg number and size). Accordingly, a new key for *Octopicola* is proposed.

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SALT EFFECT ON PHYSIOLOGICAL RESPONSES AND MONOGENEAN CONTROL IN TAMBAQUI (*COLOSSOMA MACROPOMUM*).

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The main goal of this work was to evaluate the effect of salt on physiological responses and monogenean control in tambaqui (*Colossoma macropomum*). For this, tambaqui juveniles

(42.38 ± 0.47 g; 13.90 ± 0.06 cm) were kept in 350L tanks and acclimated during a period of 24 hours. The assays were conducted using the concentrations of 0, 2, 4, 6 and 8 g of salt.L-1 of water, with exposure of 30, 60 and 120 minutes, and three replicates for each treatment. The tambaqui tolerance to salt and the efficacy of salt against monogenean were evaluated by physiological analysis (glucose, chloride, sodium and potassium plasma levels) and parasitic indices (total number of parasites and prevalence). The exposure of tambaquis to salt in the concentrations of 4 g.L-1 during 120 minutes, 6 and 8 g.L-1 during 60 and 120 minutes promoted the increase of plasmatic glucose and in the concentration of 8 g.L-1 of salt for 120 minutes increased the levels of plasmatic chloride. The prevalence of monogeneans in the gills of tambaquis was 100% and the salt concentrations evaluated in this study were not effective in the reduction of monogeneans parasites in tambaquis.

THE EFFECT OF FISH PLOIDY LEVEL ON THE STRUCTURE OF METAZOAN PARASITE COMMUNITIES OF TENCH (*TINCA TINCA* L.)

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Polyploidy, the multiplication of entire sets of chromosomes, have been observed in several phylogenetically distant plant or animal orders, including both wild and farmed fish species. Polyploidization is a common method applied in fish commercial aquaculture. In the present study, we compared selected somatic parameters between diploid (2n) and triploid (3n) specimens of tench and we tested whether there is a relationship between metazoan parasite load and fish ploidy level. Tench, cyprinid fish species commonly used for induction of triploidy in aquaculture, was investigated in this study. Fish samples were collected from breeding pond in Vodňany (Czech Republic) during four periods (September 2008, December 2008, March 2009, June 2009), and 86 diploid and 74 triploid specimens were investigated. A total of 13 metazoan parasite species (*Gyrodactylus tincae*, *Asymphylogdora tincae*, *Diplostomum* sp., *Tylodelphys clavata*, *Archigetes sieboldi*, *Caryophyllaeus* sp., *Khawia baltica*, *Neogryporhynchus cheilancristrotus*, *Valipora campylancristrota*, *Anodonta* sp., *Argulus foliaceus*, *Ergasilus sieboldi* and *Hydrozetes* sp.) were recorded. The significant differences in most of measured somatic parameters were observed between diploids and triploids. Neither host body size nor host sex had any effect on metazoan parasite abundance. The comparison of the total parasite abundance between diploid and triploid tench showed statistically significant higher parasitic load in diploids. Likewise, the significant higher abundance of endoparasites was recorded in diploids. The effect of ploidy level on ectoparasite occurrence was not found.

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MONOGENOIDEA FROM *CENTROPOMUS* SPP.: SALINITY INFLUENCES SPECIES RICHNESS?

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