

Comparative study of sound production in Holocentrids

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ORAL PRÉSENTATION

Fishes use sounds to communicate in different behavioural contexts such as courtship, reproduction, defence and aggressive behaviours. This ability is found in several unrelated taxa highlighting its significance in life. Among them, Holocentridae are vocal reef fishes found worldwide and in abundance. Since they are nocturnal, being able to produce sounds to communicate is essential. However, sounds of only few species of this family have been studied so far. Similarly, the morphology of their sound-producing apparatus has been investigated. Because morphological differences have been found between genera, differences in terms of sound features are expected too. The aim of this study is dual. We first want to compare sounds of different species recorded in the same behavioural context to determine if sounds are species-specific. Second, we want to seek whether sounds of species from the same genus show more common acoustical features in comparison with species from other genera. Different temporal (sound duration, pulse period, number of pulses, etc.) and frequential features were used for comparisons between species and genera. Results strongly support that sounds are species-specific. It also appears that sounds can testify the belonging to a given genus.