Acoustic Complexity Index (ACI) and anuran calls. Tests with Iberian species and choruses.

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Abstract

Chorus structure and chorus dynamics may differ based on the acoustic taxa considered. In this study we present the first results obtained applying the Acoustic Complexity Index (ACI), by means of the informatic tool SoundScape Meter, to the recordings of the calls of some of the main amphibian species in the order Anura from the Iberian Peninsula. Measurements are obtained from natural recordings both at the individual level and at the level of monospecific and multispecific choruses. We aim to test the behavior of this index when studying anuran calls and chorus: At the individual level, we find that there is a hyerarchy of complexity among species and a correlation with duty cycle. At the monospecific chorus level, ACI measurements reflect a generally similar hyerarchy as the individual calls, and there are no significant differences between values of monospecific and multispecific (2-3 species) chorus.

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