

Frequency-modulated vocalizations of *eupsophus queulensis* (Anura: Cycloramphidae)

Opazo, Daniel

Velsquez, Nelson

Veloso, Alberto

Penna, Mario

The advertisement calls of the recently described frog *Eupsophus queulensis* (Cycloramphidae) are analyzed, based on recordings of seven males. *Eupsophus queulensis* emits an advertisement call consisting of a harmonic-rich frequency modulated note, with dominant second and third harmonics. The temporal parameters of the calls had large intra- and interindividual variation relative to the spectral parameters. The frequency modulations follow four different patterns, as described previously for *Eupsophus calcaratus* and *Eupsophus roseus*. Individual frogs produce calls having different frequency modulation patterns, and the proportions of each pattern vary individually. A discriminant analysis positions the calls of *E. queulensis* closer to *E. roseus* than to *E. calcaratus*, which is congruent with the geographic and phylogenetic affinities, as well as with the relative body sizes of these taxa. © 2009 Society for the Study of Amphibians and Reptiles.