

Selectivity of evoked vocal responses in the time domain by frogs of the genus *Batrachyla*

Penna, Mario

The leptodactylid frogs *Batrachyla taeniata*, *B. antartandica* and *B. leptopus* in southern Chile produce advertisement calls composed of short pulses, repeated in species-specific patterns. *Batrachyla leptopus* has a call with a complex structure relative to the other species, with pulses grouped in notes. Male frogs were presented with synthetic imitations of conspecific advertisement calls and variants for which different temporal components were varied systematically. Males of *B. taeniata* responded with fewer calls to synthetic stimuli having a low pulse rate (12.5 pulses/sec) relative to a standard stimulus imitating the natural advertisement call (50 pulses/sec). In contrast, males of *B. antartandica* gave fewer responses to stimuli having a high pulse rate (8 pulses/sec) relative to the standard call of this species (2 pulses/sec). *Batrachyla taeniata* gave weaker responses to continuous tones of the same duration as the standard call (500 msec), and *B. antartandica* also decreased sig