

The advertisement call of the leptodactylid frog *Leptodactylus griseigularis*

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Adenomera griseigularis Henle, 1981 has recently been recognized as a valid species of *Leptodactylus* (Heyer, 1994). The advertisement call of *L. griseigularis* was thought to be unrecorded (Heyer, 1994), but VRM had made a recording of the species, identified at the time of recording as *Leptodactylus* sp. The purpose of this note is to describe and figure the advertisement call of *Leptodactylus griseigularis* and compare the call with those of other closely related species of *Leptodactylus*.

The recording was made by VRM on 1 April 1985 from Tingo María, Huánuco, Peru at 1930 hours, 24°C air temperature, voucher specimen Museo de Historia Natural, Universidad Nacional Mayor de San Marcos 0236. The species was calling in drainage ditches without vegetation around the Universidad Nacional Agraria de la Selva campus.

Advertisement calls ($n = 12$, fig. 1) are given at an average rate of 1.8 call per second. Call duration ranges from 8-14 milliseconds. Calls consist of a single pulse. Even though the calls are very short, they are frequency modulated, generally rising through the call. The modal dominant broadcast frequency band range is 1860-2950 Hz, the total range is 1380-3060 Hz; peak broadcast intensity of the call is at 2770 Hz. There appears to be harmonic structure in the wave form of the call, but no harmonics are evident in the audiospectrogram analyses; the quality of the recording precludes definitive clarification of whether the call has harmonic structure or not.

Leptodactylus griseigularis is as far as known, the only member of the *Leptodactylus melanonotus* species group to occur at Tingo María. There are two closely related species in the *L. melanonotus* species group that occur in the same general region of Peru, for which advertisement calls are known. These are *L. leptodactyloides* and *L. petersii*. Comparison of certain call parameters (table 1) demonstrates the distinctiveness of the calls of all three species. Based on general adult morphology, *L. griseigularis* and *L. leptodactyloides* are very close relatives, whose geographic ranges barely overlap (Heyer, 1994); but, as shown in table 1, their advertisement calls are very distinct. In fact, the call of *L. griseigularis* is distinctive within the entire genus by its brevity.

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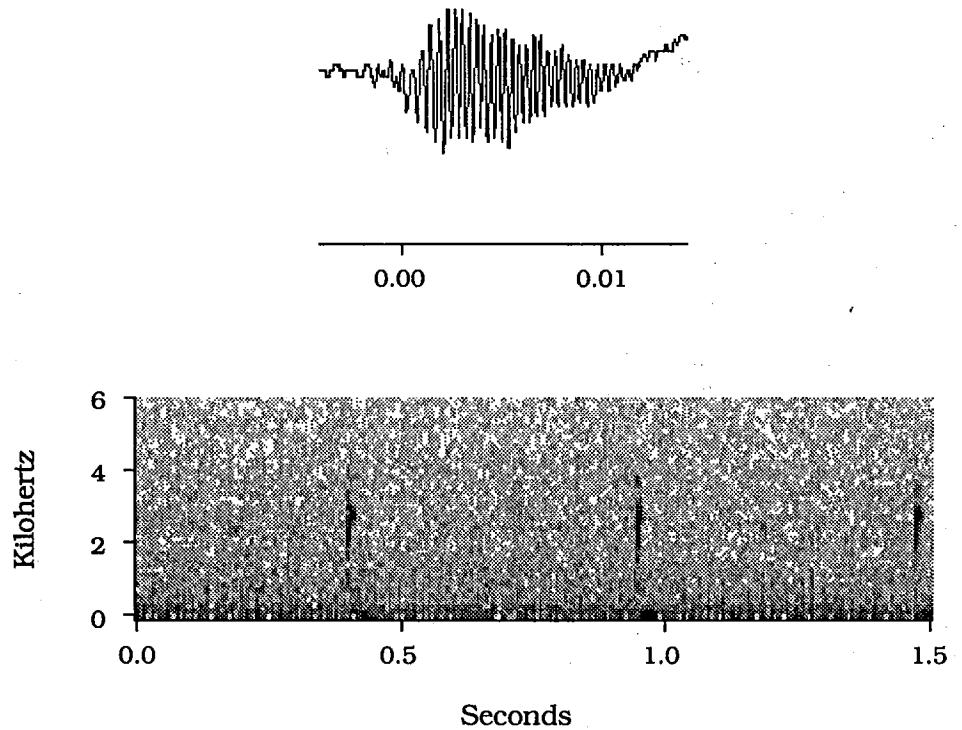


Figure 1. Wave form (above) and audiospectrogram (below) of the advertisement call of *Leptodactylus griseigularis*, USNM tape 274, cut 1. The wave form is of the same call as the last call on the audiospectrogram.

Table 1. Comparison of call characteristics of three closely related species of *Leptodactylus* from Peru. *Leptodactylus petersii* has two call types, indicated as a and b. Data for *L. leptodactyloides* and *petersii* from Heyer, 1994.

	Call duration in seconds	Calls pulsed	Dominant frequency range in HZ	Maximum call energy in Hz
<i>L. griseigularis</i>	0.01	-	1380-3060	2770
<i>L. leptodactyloides</i>	0.01-0.04	+, -	650-1600	1100-1300
<i>L. petersii</i> - a	0.04-0.05	+	700-1200	750-800
<i>L. petersii</i> - b	0.03-0.05	+	800-2800	N.A.

References

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