

**Bioacoustic Characteristics of the Crimean Gecko  
*Mediodactylus danilewskii* (Strauch, 1887) (Reptilia: Sauria: Gekkonidae)**

Oleg V. Kukushkin<sup>1, 2✉</sup>, <https://orcid.org/0000-0002-9311-0860>; [mtasketi2018@gmail.com](mailto:mtasketi2018@gmail.com)  
Mikhail Yu. Silkin<sup>1</sup>, [my.silkin@yandex.ru](mailto:my.silkin@yandex.ru)

<sup>1</sup> T. I. Vyazemsky Karadag Scientific Station – Nature Reserve of the Russian Academy of Sciences – Branch of A. O. Kovalevsky Institute of Biology of the Southern Seas of Russian Academy of Sciences  
24 Nauki St., Kurortnoe town, Theodosia 298188, Russia  
<sup>2</sup> Zoological Institute of Russian Academy of Sciences  
1 Universitetskaya emb., Saint Petersburg 199034, Russia

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**Abstract.** For the first time, the amplitude-frequency and temporal characteristics of the acoustic signals (the distress one and two types of advertisement calls) of the Crimean gecko (*Mediodactylus danilewskii*) were analyzed. The distress call is a rather long one (usually around 150–350 ms, but sometimes up to nearly 1 s), with a peak frequency of 6.86 kHz in both males and females. The upper harmonics of this type of signal lie in the ultrasonic region of the frequency spectrum. The short advertisement call has a different duration in males and females, namely, about 23 ms and 35–40 ms on average, respectively. The peak frequency of this type of signal is 4.82 kHz in both sexes. Some frequency parameters of the acoustic signals are characterized by lower values in males than those in females, despite the larger body sizes of the latter. E.g., 35% and 11% of the total distress call energy is below 4 kHz in males and females, respectively. The average value of the fundamental frequency of short advertisement calls in males and females is 1.75 kHz and 3.33 kHz, respectively, while the limits of variability of this parameter in representatives of both sexes almost do not overlap. The prospects of using bioacoustics for solving important issues of the *Mediodactylus (kotschyi)* superspecies taxonomy are discussed. We assume that the male long advertisement call, which is a sequence with a duration of 4 to 9 s consisting of 24–44 clicks with an average peak frequency below 4 kHz following each other at a rate of 6.4–9.1 clicks/s, will be most informative for these goals.

**Keywords:** *Mediodactylus*, vocalization, distress call, advertisement call, multiple click call, Crimea.

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