



ON DISTRESS CALLS OF MALE *Hemidactylus brookii parvimaclatus* DERANIYAGALA, 1953 (REPTILIA: GEKKONIDAE) FROM SRI LANKA

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Abstract

Two types of distress calls were recorded from three male *Hemidactylus brookii parvimaclatus*. One type consisted of clicks and one of a single squeak. Twelve calls were analysed. Distress calls comprising a squeak had an average length of 0.070 sec while those comprising clicks averaged 0.329 sec. The difference in length of the two types of calls was significant ($P < 0.05$). Average maximum sound intensity of all calls was 76.9 dB and was reached between 3045 Hz and 7473 Hz ($\bar{x} = 4451$ Hz). Maximum frequency varied from 7194 Hz to 16238 Hz having an average of 13393 Hz and the average minimum frequency was 1230 Hz. All squeak distress calls showed harmonics, whereas no harmonics occurred in calls with clicks.

Key words: *Hemidactylus brookii parvimaclatus*, bioacoustics, distress call, Sri Lanka.

Introduction

A number of gecko species are known to emit calls in potentially dangerous situations. These may either be threat calls of a gecko calling prior to physical contact and to intimidate a conspecific or a potential predator. These calls may be rather long in duration. After contact, usually after a gecko has been bitten, it may react with a comparatively short distress call which is certainly the call most often described in geckos (e.g. Barts, 2002, 2006; Brown, 1985; Frankenberg, 1973, 1975, 1978; Gramentz, 2005b,c,d, 2007; Gramentz & Barts, 2004; Kreuzer & Grossmann, 2003; Marcellini, 1974; Morgue, 1913; Nettmann & Rykena, 1985; Scerbak, 1981;

Werner *et al.*, 1978). According to Frankenberg (1975) distress calls have an antipredatory function. Information from a number of species of the genus *Hemidactylus* is available on sound production during different situations, including *H. frenatus* (Frenkel, 2006; Marcellini, 1974, 1977; McCann, 1940), *H. turcicus* (Frankenberg, 1982), *H. mabouia* (Gramentz, 2003; Regalado, 2003), *H. platycephalus* (Gramentz, 2005a) and *H. angulatus* (Gramentz, 2005d). The first anatomical studies on the voice apparatus of the genus were carried out one century ago by Steck (1908) on *H. garnotii*. Probably the first mention of the voice of