



STATUS AND MICROHABITAT PREFERENCE OF *Otocryptis beddomii* BOULENGER, 1885 (REPTILIA: AGAMIDAE) IN PONMUDI HILLS, WESTERN GHATS, KERALA, INDIA

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Abstract

The population of *Otocryptis beddomii* in Ponmudi Hills of Kerala, India was examined to assess its status and microhabitat preference. The encounter rate was significantly higher in pristine habitat (3.51 sightings/km) than in disturbed habitat (0.97 sightings/km). Sighting frequency was highest in rainforests (60) of mid-altitude (68) and the most-utilized substrate was leaf litter (79.2%). Disturbances due to human activities had a significant (Proportion test; $z = 2.93$, $p < 0.05$), adverse impact on its population.

Keywords: sex ratio, encounter rate, substrate, altitudinal distribution, habitat quality

Introduction

Otocryptis beddomii Boulenger, 1885, is a mesic-forest dwelling terrestrial agamid, endemic to southern Western Ghats, distributed in the states of Kerala and Southwestern Tamil Nadu, India (Das, 2002; Inger *et al.*, 1984; Ishwar *et al.*, 2003; Kumar *et al.*, 2001; Murthy, 1985; Smith, 1935). The large concentrations of the earlier studies on South Indian agamids were on arboreal forms (Bhupathy & Kannan, 1997; Ishwar *et al.*, 2003; Kumar *et al.*, 2001). *Otocryptis beddomii* being the only ground dwelling agamid, occurring in the rainforests of Western Ghats, was the least studied. Bhupathy &

Kannan (1997) have recommended status assessment for this species, based on its absence in their extensive survey throughout southern Western Ghats. Studies on this species were done by Murthy (1980), Daniels (1991) and Joce *et al.* (2007). This species has been included under "Vulnerable" category of IUCN, by Molur & Walker (1998). The present study focuses on its status and microhabitat preference in Ponmudi Hill range.

Study Area: Ponmudi Hills (8° 45' N, 77° 08' E), lying below the Senchottah gap of Western Ghats,