HERPETOTROPICOS Vol. 5(2):111-113

ISSN 1690-7930 (Printed) ISSN 1856-9285 (Online)

HEMIDACTYLUS MACULATUS HUNAE (REPTILIA: GEKKONIDAE) PREYS ON *BANDICOTA BENGALENSIS* (MAMMALIA: RODENTIA) IN THE GALOYA NATIONAL PARK, SRI LANKA

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Abstract: The Spotted giant gecko, *Hemidactylus maculatus hunae*, is the largest gecko recorded in Sri Lanka and it is considered to be endemic of the island. There are few records of geckos feeding on vertebrates, and this is the first record of a gecko feeding on a rat species. More research is needed about the behaviour and other aspects of the biology of *H. m. hunae*.

Key words: Spotted giant gecko, mole rat, predation, feeding behaviour, Sauria, lizard.

Resumen: D.M.S. S. Karunarathna y A.A. T. Amarasinghe. "*Hemidactylus maculatus hunae* (Reptilia: Gekkonidae) depreda sobre *Bandicota bengalensis* (Mammalia: Rodentia) en el Parque Nacional Galoya, Sri Lanka". El geco gigante manchado, *Hemidactylus maculatus hunae*, es el gecko de mayor tamaño registrado en Sri Lanka y es considerado endémico de la isla. Hay pocos registros de gecos que se alimentan de vertebrados, y este es el primer registro de un geco alimentándose de una especie de rata. Se necesita más investigación acerca del comportamiento y otros aspectos de la biología de *H. m. hunae*.

Palabras Clave: Geco gigante manchado, rata topo, depredación, comportamiento alimentario, Sauria, lagarto.

INTRODUCTION

Forty two species or subspecies belonging to eight genera of geckos, family Gekkonidae, have been recognized from Sri Lanka and 31 (71%) of them are endemic to the island (Amarasinghe *et al.* 2009; Somaweera and Somaweera 2009). The gecko genus *Hemidactylus* comprises eight species or subspecies and the spotted giant gecko, *Hemidactylus maculatus hunae*, is an arboreal species found on granite caves, rock-out boulders, anthropogenic habitats and trees in the shaded areas in the dry and intermediate zones of Sri Lanka (Das and de Silva 2005, de Silva *et al*. 2004a).

Hemidactylus maculatus hunae is the largest gecko in the country (Deraniyagala 1953). It is locally known as "*Daventha Thith Hoona*" (de Silva *et al*. 2004b) or "*Thalagoi Hoona*" (in Sinhala language) and attains a snout-vent length of over 120 mm and tail lengths of over 140 mm. This subspecies is considered endemic to Sri Lanka (Wickramasinghe and Somaweera 2008) and may be a distinct species (Amarasinghe *et al.* 2009). *Hemidactylus m. hunae* is often observed during the period 19:00-23:00 h and is exclusively nocturnal. Males, females and juveniles live in the same habitats. *Hemidactylus m. hunae* is highly carnivorous and mainly feeds on invertebrates, especially insects. However, *H. m maculatus* actively preys on small vertebrates such as geckos, skinks, agamid lizards, small birds and small mammals ("All these records are from India"; Daniel 2002). Here we report, with photographic evidence, the feeding habit of *H. m. hunae*, while predating on a pest rat species.

OBSERVATION

Observations were made on 8 of August 2009 in the 'Makarae' (=Dragon Mouth), Galoya National Park (112 m elevation; 07°11'44.88"N, 81°26'13.81"E, Fig. 1) in Monaragala District of Uva Province, Sri Lanka. Observations were made without disturbing the gecko. A mature male *H. m. hunae* (approx. 300 mm in total length) was observed from a distance of 2 m at 22:10 h on a large rock boulder (4 m height and 6 m wide). It then moved slowly to the forest floor where there were two small rat holes nearby, one belonging to an antelope rat (*Tatera indica*) and the other to a mole rat (*Bandicota bengalensis*). After about 20 minutes, we heard a small noise – '*crivk crivk crivk*'.

At this time the gecko quickly came out of the mole rat hole with a juvenile mole rat (5 cm long) in its mouth (Fig. 2). Then the gecko dashed the prey three times on the granite rock wall and repeated this action eight to ten times. It then swallowed the prey head first at about 22:45 h. After five minutes, the gecko immediately retreated

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Published / *Publicado*: 10 MAY 2011

Fig. 1. Habitat of the spotted giant gecko in Galoya National Park, Sri Lanka.
Hábitat del geco gigante manchado en el Parque Nacional Galoya, Sri Lanka.

back to a fracture of the rock boulder. No additional observations of predation on this rat species by *Hemidactylus maculatus hunae* were recorded. However, Dattarti (1984), Kannan and Krishnaraj (1988), Somaweera (2005) and Sumithran (1982) reported *Hemidactylus leschenaultii* preying on a rat, gecko, skink and a colubrid snake.

In most cases, *Bandicota bengalensis* is considered a pest species in croplands and home gardens and it also causes public health problems in Sri Lanka. This rat species has successfully adapted to the urban habitat in many countries, including India, Pakistan, Indonesia, Thailand and Malaysia (Groves 1984).

ACKNOWLEDGEMENTS

The authors would like to thank Dilshad Jemzeed, Niranjan Karunarathna, Nadeesh Gamage and P.G.P. Prabhath (DWC) for the various help during the observation. Finally, we wish to thank Mendis Wickramasinghe (HFS), Nayanaka Ranwella and Kelum Manamendra-Arachchi (WHT) for their help.

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Fig. 2. The spotted giant gecko preys on juvenile mole rat.
El geco gigante manchado depreda una rata topo juvenil.

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