



Record of the Indo-Pacific Slender Gecko *Hemiphyllodactylus typus* (Squamata: Sauria: Gekkonidae) from the Andaman Islands, India

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The Andaman and Nicobar Islands are situated in the Bay of Bengal. The Andaman Islands and the Nicobar Islands are separated by a deep channel called the Ten Degree Channel that also divides them into two distinct zoogeographical zones (Rodgers & Panwar 1998). Herpetofaunal affinities of the two island groups have been discussed and in general, it is concluded that the Andamans are more allied to the Indo-Chinese region, while the Nicobars show a greater affinity to the Sundas (Das 1999). The family Gekkonidae is represented in the Andaman and Nicobar archipelago by eight and nine species respectively, with three and two species being endemic to each of the two

island groups respectively (Das & Vijayakumar 2009; Harikrishnan et al. 2010). Herewith, we report and confirm the occurrence of Indo-Pacific Slender Gecko *Hemiphyllodactylus typus* in the Andaman Islands based on freshly collected specimen during recent herpetofaunal surveys conducted as a part of an ongoing study.

Hemiphyllodactylus typus Bleeker, 1860

Two specimens each from two localities, namely Long Island (12.37°N & 92.92°E; 35m) in the Middle Andaman and Mt. Harriet National Park (c.a. 11.42°N & 92.43°E; 300m) in the South Andaman, were collected. The specimens HC003 (ZSI 6485-3) and HC058 (ZSI 6485-1) from Long Island (Image 1) were found inside an old building adjacent to a forest. One of the Mt. Harriet specimens HC059 (ZSI 6485-2) was found inside the forest guest house while the other HC060 (ZSI 6485-4) was found outside a cottage. This area is surrounded by primary evergreen forests. We assign these geckos to the nominate species based on the following characters: body depressed, slender and elongate; the first digit in fingers and toes rudimentary and lacking claws, no distinct post-mentals, mental triangular, almost as broad as deep, dorsum smooth, lacking tuberculation, ventral scales smooth and imbricate. Body pale brown, with dark brown irregular streaks on the trunk and paravertebral bright orange spots, tail bright orange coloured ventrally. One of our samples (SVL 39.65mm) HC058 (ZSI 6485-1) was a gravid female and laid two eggs, which measured 7.29×6.02 mm and 7.3×5.81 mm. Another specimen HC059 (ZSI6458-2) measuring 35.9mm SVL had 11 enlarged pre-anal scales with pores arranged in an angular series, and three femoral pores on each thigh that are separated from the pre-anal series. There were two rounded cloacal spurs on each side. The summary of characters and measurements of the four specimens are given in Table 1. The specimens are presently housed at the collections of Wildlife Institute of India, to be deposited at National Zoological; Collection at Zoological Survey of India, Port Blair. HC003 (ZSI 6485-3), HC058 (ZSI 6485-1), HC059 (ZSI6458-2) and HC060 (ZSI 6485-4) are the WII field tag numbers which will be retained even upon deposition at ZSI.

Systematics of *Hemiphyllodactylus typus* was

Date of publication (online): 26 April 2012
Date of publication (print): 26 April 2012
ISSN 0974-7907 (online) | 0974-7893 (print)

Editor: C. Srinivasulu

Manuscript details:

Ms # o2856
Received 30 June 2011
Final received 23 September 2011
Finally accepted 08 March 2012

Citation: Chandramouli, S.R., S. Harikrishnan & K. Vasudevan (2012). Record of the Indo-Pacific Slender Gecko *Hemiphyllodactylus typus* (Squamata: Sauria: Gekkonidae) from the Andaman Islands, India. *Journal of Threatened Taxa* 4(4): 2536–2538.

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Acknowledgement: We would like to thank the Department of Forests and Wildlife, Andaman and Nicobar Islands for permission to conduct herpetofaunal surveys in these Islands. We especially thank the Divisional Forest Officer, Middle Andaman and the Range Forest Officer, Long Island, for their support. We thank India's Department of Science and Technology Science and Engineering Council Projects Appraisal Committee on Life Sciences, for providing funds for this study.

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image 1. Indo-Pacific Slender Gecko *Hemiphyllodactylus typus* Bleeker, 1860 (HC 058) in life from Long Island, Middle Andaman, Andaman and Nicobar Islands, India.

Table 1. Meristic and metric characters of four specimens of *Hemiphyllodactylus typus* from the Andaman Islands.
(All measurements in mm)

Character	HC058 (ZSI 6485-1)	HC059 (ZSI 6485-2)	HC 003 (ZSI 6485-3)	HC060 (ZSI 6485-4)
Snout-vent length	39.65	35.90	41.52	34.40
Axilla-groin distance	19.26	17.84	20.39	17.65
Tail length	31.0	26.64	6.24*	17.44*
Head length	6.46	5.73	6.24	5.52
Head width	5.77	5.15	5.64	4.45
Head depth	3.08	3.12	3.37	2.76
Eye diameter	1.90	2.02	2.12	1.53
Eye to nostril	2.50	2.35	2.83	2.25
Eye to snout	3.03	3.15	3.60	2.88
Eye to tympanum	2.73	2.92	3.32	2.90
Supralabials (L, R)	10,10	11,12	11,12	10,10
Infralabials (L, R)	9,9	10,9	9,10	9,9
Subdigital lamellae under 4 th finger (L, R)	4,4	3,3	4,4	3,3
Subdigital lamellae under 4 th toe (L, R)	5,4	5,4	4,4	4,3

* - tail incomplete

elaborately discussed by Bauer & Das (1999), who concluded that *H. typus* is a distinct species composed of a parthenogenetic population. They considered that *H. aurantiacus* deserved specific distinction from

H. typus based on the reduced number of subdigital lamellae under the 4th toe, reduced number of presacral vertebrae and distinguishable bisexuality in the former species. Also, they remarked that the Sundan population of *H. typus* was not adequately sampled to be considered unisexual. Literature based on field surveys conducted in the Andaman and Nicobar archipelago have not reported this species from any other island except Great Nicobar, which is the southernmost island of the archipelago (Biswas & Sanyal 1980; Das 1999; Vijayakumar 2005). Further, Das (2002) reported it to be recorded from “the Andaman Islands of India, besides Sri Lanka, Thailand, the Malay peninsula, Borneo....” excluding the Nicobars. This was also reiterated by Javed et al. (2010). Somaweera & Somaweera (2009) reported its range from “Bali, Borneo.....India..... Nicobar Islands....”, but did not include the Andaman Islands. Zug (2010) in his extensive review of *Hemiphyllodactylus* redefined *H. typus*, and did not include the Andaman and Nicobar Islands in the geographic range of the species. Elsewhere, in the same publication, he lists Great Nicobar Island as a locality record based on the report of Biswas & Sanyal (1980). Considering this, our observations and samples from two different localities in the Andamans support the earlier report of this species from this region by Das (2002). Since all

the specimens were found in or close to buildings, the possibility of human introduction into the islands as speculated by Das (1999) cannot be ruled out. In our ongoing surveys we are yet to record this species in primary undisturbed forest.

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