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**FIRST RECORD OF *HEMIDACTYLUS PERSICUS*
ANDERSON, 1872 (SQAMATA: SAURIA:
GEKKONIDAE) FROM THE REPUBLIC OF INDIA,
WITH NOTES ON ITS DISTRIBUTION**

The Persian gecko, *Hemidactylus persicus*, is widely distributed, from eastern Arabia to southern Iran, and in the east, it reaches Sindh and Waziristan in Pakistan (Smith, 1935; Anderson, 1999). In Pakistan, Minton (1966) did not record the species east of the Indus River. The species is a member of a chiefly arid zone clade of *Hemidactylus*, which also includes the widespread Mediterranean form *H. turcicus* (Carranza and Arnold, 2005). It prefers xeric habitats, especially rocky deserts, flood plains and thorny *Euphorbia* forests, and it is occasionally observed in edificarian situations (Smith, 1935).

During the study of the reptilian fauna of Gujarat State, one of the authors (RV) collected specimens of an unusual gecko in and around the Jassore Wildlife Sanctuary, Gujarat State, India. After examination it was identified as *Hemidactylus persicus* Anderson, 1872.

The Jassore Wildlife Sanctuary (JWS) is in Banaskantha District, Gujarat State, and is one of the prime habitats of the Sloth Bear, *Melursus ursinus*. The sanctuary lies between 24° 20' and 24° 31'N; 72° 23' and 72° 37'E, and encompasses an area 180.66 km². The area is in the most south-westerly part of the Aravalli

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Hills and the habitat continues into the adjacent portion of Rajasthan State. Champion and Seth (1968) classified the area as a dry deciduous mixed with dry arid and grasslands. The dominant tree species in the area are *Acacia catech* (Khair), *Acacia nilolica* (Baval), *Zizyphus sp.* (Bor), *Butea monosperma* (Khakharo) *Anogeisus latifolia* (Dhav), *Wrightia tinctoria* (Dudhalo), *Boswellia serrata* (Saledi) and *Prosopis juliflora*.

Recent survey result shows that the sanctuary harbours 12 species of amphibians and 35 species of reptiles (Vyas, 2005). Four adult specimens of *Hemidactylus persicus* were collected in and around the JWS as voucher. All were deposited in the museum of Bombay Natural History Society (BNHS 1710 to 1713), Mumbai. Measurements and pholidosis of these specimens are provided in Table 1.

This species is locally uncommon and found in and around areas used by humans, including under rocks and tree logs, on large boulders and in ruined houses along with two other congeners, *H. flaviviridis* and *H. brookii*. It is active from early to late evening, emerging from diurnal retreats to forage shortly after sunset. At present, the species has been recorded at three localities: Balundra village, Forest Guest House and the campus of the Kedarnath Shrine; the last two localities lie within the protected area.

If this species is naturally distributed in and around the tropical deciduous forest of Jassore, it is possible that *Hemidactylus persicus* is distributed in other parts of the state from Kachchh to northern Gujarat and most probably adjacent areas of Rajasthan State, which share similar habitats. Therefore, a survey is needed to determine the actual distributional range of the species, especially in two protected areas, namely Balaram-Ambaji Wildlife Sanctuary, Gujarat and Abu Wildlife Sanctuary, Rajasthan, that provide environments similar to that at Jassore. Further, survey in such protected areas, relatively free of human disturbance, would help to rule out the possibilities that *H. persicus* has become established in India through human agency as have several of its congeners in other parts of the world.

The present localities of JWS and its environs in the Banaskantha District of Gujarat State are

east of Indus River at an approximate airline distance of 600 km from Karachi, Pakistan, previously the most south-easterly recorded locality for the species. *Hemidactylus persicus* has not previously been recorded from Gujarat (Gayen, 1999; Vyas, 2000; Sharma, 2000), nor from the Republic of India (Murthy, 1990; Tikader and Sharma, 1992; Sharma, 2002), thus, the records presented here represent not only a significant eastern range extension for the species, but also new state and national records.

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LEPIDODACTYLUS (SQUAMATA: GEKKONIDAE) IN ISLANDS ASIA: A *L. AUREOLINEATUS* FROM SULAWESI

Lepidodactylus geckos are modestly abundant lizards in many Oceania herpetofaunas but become increasingly uncommon to rare in the faunas of the larger islands and island groups of the Pacific Rim, and even more uncommon in Islands Asia. This rarity has no current explanation, nor am I aware that anyone has attempted to explain it. Thus, a specimen of *Lepidodactylus* from Sulawesi in the Naturalis collection was unexpected.

Presently, four species of *Lepidodactylus* are reported from Islands Asia. *L. lugubris* is the most widespread of these four and occurs in Cu Lao (Vietnam), Borneo, Sulawesi, Ambon, Halmaheira, Ternate, Komodo, and Lombok in this

area (Ineich, 1999). Because of its occurrence also throughout the Pacific and coastally from other Asian islands and mainland (de Rooij, 1915), *L. lugubris* must be considered an exotic species, probably beginning its human-mediated dispersal within the last five centuries through European shipping. Its hybrid origin lies in eastern Micronesia and is relatively recent (Radtkey et al., 1996). The other species are older island residents, arriving and differentiating presumably well before the arrival of humans in Asia. These species have limited distributions: *L. lombocensis*, Lombok; *L. intermedius*, Komodo and Rintja Islands.; *L. ranauensis*, Borneo (Sabah). Another species, *L. listeri*, occurs to the west on Christmas Island in the Indian Ocean.

The preceding five taxa represent the three phenetic groups (Brown and Parker, 1977) of *Lepidodactylus*. *L. lugubris* is a Group III member, *L. intermedius* and *L. lombocensis* Group II, *L. listeri* Group I, and *L. ranauensis* intermediate between Group I and II (Ota and Hikida, 1988; Bauer, 1994; Ota et al., 2000). Group III appears to be most derived “clade” of *Lepidodactylus*, and with the exception of *L. lugubris*, Group III members occur on Pacific islands with the greatest diversity in the Philippines. The Naturalis specimen (RMNH 7341, Groot Sanghis, e/o [=vicinity of] Soemalata) from the north coast of Sulawesi was hidden under the *lugubris* epithet but a close examination revealed its misidentification and dissection revealed that it was a mature male. My initial assumption was that this specimen represented a new species, but further examination revealed it to be a *L. aureolineatus* and a likely introduction from the Philippines.

Brown and Alcalá (1994:78–101) provide a thorough overview of the Philippine *Lepidodactylus*. They recognize two sections of Group III *Lepidodactylus*. Section A geckos have 4ToeL (see Zug et al., 2003 for character abbreviations and definitions) greater than 12, tail only moderately depressed and no lateral skin flange, and combined femoral-precloacal pores greater than 26. RMNH 7341 has 13 4ToeLm, moderately depressed tail without flange, and 29 FemPor + PreclPor. Additionally, it has 115 Midb, which differentiates it from *L. herrei*, the other section A *Lepidodactylus*. In summary, RMNH 7341 is an adult male with large testes and epididymi-