



Report on Hemidactylus Flaviviridis Rüppell, 1835 (Sauria: Gekkonidae) an Invasive Gecko Chennai District, South India.

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The gekkonid lizard genus *Hemidactylus* is one of the most dominant groups of reptiles in India (Venugopal, 2010). In India, 25 species of this genus are currently recognized (Agarwal et al., 2011). From the Deccan plateau 11 species of *Hemidactylus* have been reported (Venugopal, 2010). The first part of the present series (Mahendra, 1936), besides giving a general introduction to the work, dealt with the systematic position of *Hemidactylus flaviviridis* Rüppell, its taxonomic history, geographical distribution, habits, habitat, reproductive phenomena and development. The genus *Hemidactylus* Oken, 1817, is a wide-spread group of geckos, distributed through out much of the Old World tropics and subtropics as well as in the Mediterranean an region and in the Americas (Giri & Bauer 2008). Some species of *Hemidactylus* have undergone natural and anthropogenic long distance dispersal, followed by colonization of new areas (Kluge 1969, Vanzolini 1978, Carranza et al. 2000, Vences et al. 2004). Human related translocations have re-sulted in some of these invasive lizards having an almost cosmopolitan distribution in tropical and warm temperate regions (Vences et al. 2004, Carranza & Arnold 2006). which are native to tropical Asia, but have also colonized and become naturalised in many parts of the world which are native to tropical Asia, but have also colonized and become naturalised in many parts of the world. The demonstrated ability of invasive *Hemidactylus* species to displace or extirpate native or established geckos suggests that the arrival and naturalisation of such species. Although Ahmed et al. (2009) reported *H. flaviviridis* from Assam, no mention was made regarding specific localities. Previous work on this species in India had reported that Bengal was at the extreme eastern edge of the range (see Smith, 1935). Recently Purkayastha & Das (2009) provided specific locality records of this lizard from Guwahati, Assam. These records suggest that *Hemidactylus flaviviridis* in India is more-or-less continuously distributed from Gujarat, Punjab and Rajasthan in the northwest, to Madhya Pradesh in the south and Bengal in the east. The first vouchered records from Assam, and Northeast India in general were those of Ahmed et al. (2009) and Purkayastha & Das (2009). The species distributed in Oman, Iraq, Iran, Afghanistan, Bangladesh, N Somalia, Sudan, Ethiopia, and Eritrea, Egypt, India, Saudi Arabia. The commercial areas occupied by *H. flaviviridis* were full of godowns and ware houses where produce, particularly cereals (rice), legumes and vegetables (potatoes and onions only) from other places in India are stocked and distributed. Many of the areas from which the goods were obtained, such as Punjab, Delhi, Bihar, Gujarat, Maharashtra and Bengal are within the native range of *H. flaviviridis* (e.g. Smith 1935, Sharma 2002). Currently, the genus *Hemidactylus* has approximately 100 representative species worldwide (Uetz 2009). In India, this genus is represented by up to 26 species (Giri & Bauer 2008, Giri et al. 2009, Bauer et al. 2010). Seven of these, namely *H. frenatus* (Schlegel, 1836), *H. brookii* (Gray, 1845), *H. bowringii* (Gray, 1845), *H. gamotii* (Duméril & Bibron, 1836), *H. platyurus* (Schneider, 1792), *Hemidactylus flaviviridis* (Rüppell, 1835), and *H. karenorum* (Theobald, 1868), have been reported from North-eastern India (Ahmed et al. 2009). The demonstrated ability of invasive *Hemidactylus* species to displace or extirpate native or established geckos suggests that the arrival and naturalisation of such species anywhere in the world should be carefully documented and its effects on the local gecko fauna monitored.

The subdivisions of Nungambakkam include Mahalingapuram, Lake area, Village road, Sterling road, College road, Shenoy road and Haddows road. Nungambakkam (13.0654°N 80.2326°E) is one of the oldest parts of Chennai. It formed the western limits of Madras until the 1960s, and it was part of Madras since the 18th century. In the early part of the 20th century, Nungambakkam rose as one of the upper-class European residential areas, The specimen spotted from near Loyola college Chennai. In this paper we present further data on the distribution of *Hemidactylus flaviviridis* in India and its status recorded Chennai city, Tamilnadu. We also provide a preliminary assessment of the effect of *H. flaviviridis* on the local populations of *Hemidactylus* spp.. Further monitoring will be required to determine if *H. flaviviridis* will expand out of the limited areas it currently occupies in Chennai and also to assess the nature of its ecological interactions with native geckos.

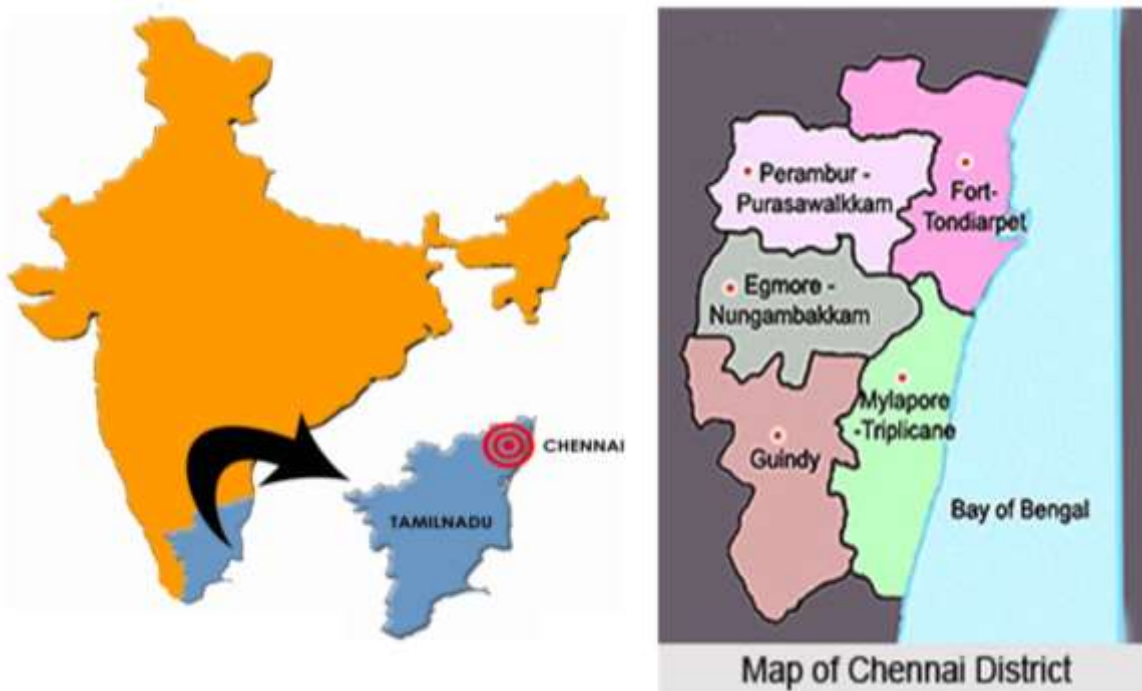


Figure 1. A map showing location of (Nungabakkam) Chennai district of Tamilnadu.



Figure 2. Hemidactylus flaviviridis (yellow-belly gecko yellow-belly gecko or northern house gecko).

References:

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