

Occurrence of large-scaled pit viper *Trimeresurus macrolepis* Beddome, 1862 in the forest canopy of Kalakad Mundanthurai Tiger Reserve, southern India

Kadaba Shamanna Seshadri

The Large Scaled Pit Viper *Trimeresurus macrolepis* is a moderately long pit viper (maximum length 580mm) with characteristic large scales on the upper surface of the head and a lower number of dorsal mid-body scale rows (12-15) than other pit vipers found in India (17-31) (Smith, 1943). The ecology and natural history of this species is relatively unknown. Arboreal and nocturnal in habit, *T. macrolepis* are often seen on vegetation around streams and forest trails, where they may stay without much movement for several days (Whitaker and Captain, 2004; pers.obs.). The distribution of *T. macrolepis* is restricted to mid and high altitude wet evergreen forests south of the Palghat Gap in the southern Western Ghats region of India.

On 28 March 2009, a large scaled pit viper was observed at a height of ca. 25m above the ground on a branch of an emergent tree *Cullenia exarillata* in the Kakachi forest range of the Kalakad Mundanthurai Tiger Reserve, South India (KMTR, 8.65° N and 77.37° E, 900km², 100-1800m, Fig. 1). The snake was found in the outermost part of the canopy, ca. 7m from the main trunk on a branch ca. 3 cm in girth. The snake was sighted after ascending the tree using single rope technique to study epiphytes.

The *T. macrolepis* was motionless from when it was first spotted at 09:39hrs through 10:30hrs where it made very slow movements and turned around to face the main tree trunk. It tucked its head under the body and stayed there till 11:48hrs when the author came down the tree. Filtered sunlight fell on a few spots on the branch. One such spot was occupied by the snake. The identity of this snake was confirmed by taking photographs (Fig. 2) and comparing them with reliably identified images of this species in Whitaker and Captain (2004). The snake was not collected. A short video of the snake in canopy

was shot using a hand held Canon S5 IS camera and is available at <http://tinyurl.com/c5scgdx>.

Trimeresurus macrolepis has been previously encountered over 25 times while carrying out studies in the KMTR. All these encounters have been on the ground, or on bushes about 2m in height. Five encounters were when the snake was crossing or foraging on the road at night after light to heavy rainfall. There is only one previous report of the snake being found in the canopy when it was seen on an *Ormosia travancorica* tree about 20m high in the same area (Soubadra Devy, 2003 pers. comm.)

The abundance of rodents and the occurrence of frogs along with other birds in the canopy could be a potential hunting ground for the snakes and one of the reasons for them to be found in the canopy. Further studies on the habitat requirements and food habits of *T. macrolepis* need to be carried out for a better understanding of the natural history and ecology of this species..

Acknowledgements. Johnson, assisted in field surveys and helped locate the snake. Dr. Soubadra Devy provided information on the previous sighting of snake. Ashok Captain provided critical inputs on the note and encouraged its publication. The author is thankful to all of them.

References

- Smith, M.A. (1943): The Fauna of British India, Ceylon and Burma, including the whole of the Indo-chinese subregion. Reptilia and Amphibia. Vol. III, Serpentes. London, Taylor & Francis.
- Whitaker, R., Captain, A. (2004): Snakes of India: The Field Guide. India, Draco Books.

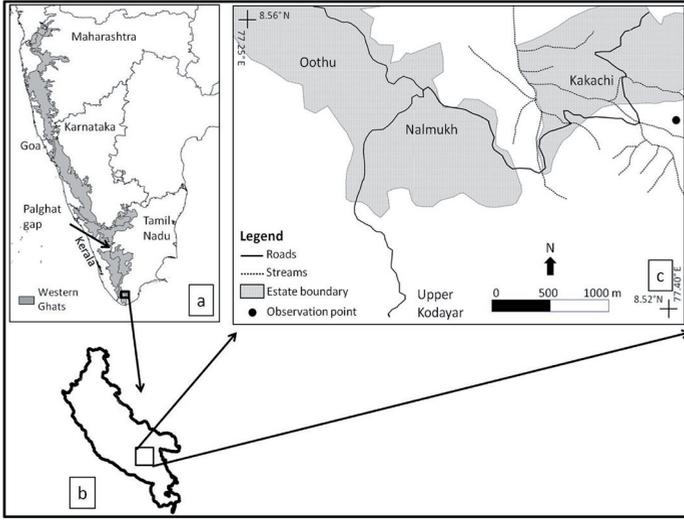


Figure 1. Map showing the locality. (a) the south western part of India with Western Ghats; (b) boundary of the KMTR and (c) the detailed area of the observed point near tea estate.

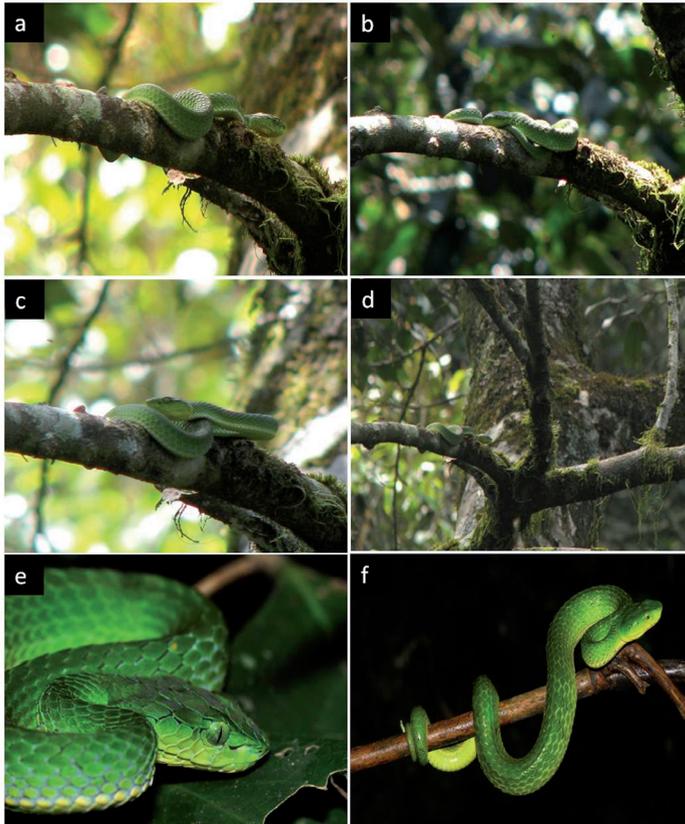


Figure 2. Plate showing images of *T. macrolepis*. (a-c): close up shots of the snake in canopy; (d) wide shot of the snake in canopy; (e) dorso-lateral view and (f) body profile (all photos by author)