Record of the Redback Spider from the Eastern Ghats of Tamil Nadu

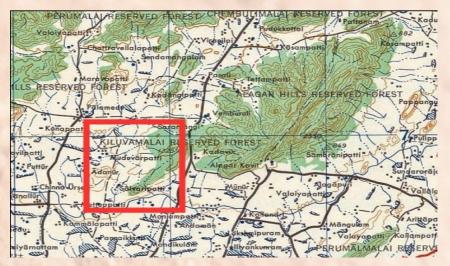
The genus Latrodectus Walckenaer, 1805 is represented by 32 species worldwide (Shrestha & Dorr 2020). L. hasselti Thorell, 1870 is scattered in southern and southeastern Asian countries including India (Pocock 1900; Tikader 1987). Until 2007, only L. hasselti was known for India (Pocock 1900; Daniel & Soman 1961; Tikader 1987; Siliwal & Kumar 2001; Hippargi et al. 2012). Later, L. geometricus Koch, 1841 (Shukla & Gour Broome 2007), L. elegans Thorell, 1898 (Kananbala et al. 2012) and L. erythromelas Schmidt & Klaas, 1991 (Srinivasulu et al. 2013) have been added to the Indian list (Parasharya et al. 2015). Simon (1897) considered Indian L. hasselti as a separate subpopulation and described it as a subspecies L. hasselti indicus. But Levi (1959) mentioned that its origin is unclear.



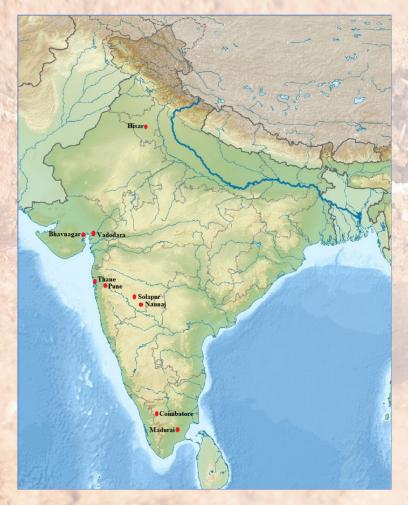
Latrodectus hasselti from Kiluvamalai RF, Madurai District, Tamil Nadu. © R.Kishore & P. Dailiah Roopha.

The reports on the presence of L. hasselti from India are very modest. In India, it was first reported from Pune, Maharashtra (Simon 1897; Pocock 1900) and later on from Thane, Maharashtra (Daniel & Soman 1961), Bhavnagar, Gujarat (Patel 1973; Tikader 1987), Vadodara, Gujarat (Siliwal & Kumar 2001), Great Indian Bustard Sanctuary, Nannaj and Yedshi Ramling Ghat Wildlife Sanctuary, Solapur, Maharashtra (Hippargi et al.

2012). Recently, it was spotted in Hisar, Haryana by Goyal & Malik (2017). In Tamil Nadu, it was reported from Coimbatore, extending the known range to the southern part of Western Ghats (Kumar & Siliwal 2005). The earlier records point out the distribution of *L. hasselti* from the hill ranges of western India ranging from Gujarat to Tamil Nadu (Kumar & Siliwal 2005).



Location of Redback Spider *Latrodectus hasselti* recorded in Kiluvamalai RF, Madurai District, Tamil Nadu.



Distribution of Latrodectus hasselti in India.

In 2019, during our study on faunal diversity in the thorn forests of Kiluvamalai in the Madurai District, Tamil Nadu, we sighted Redback Spiders. Kiluvamalai is a small hillock adjacent to Alagar Hills in Eastern Ghats with thorny vegetation and rocky terrain. The hill rejuvenates its greenery in the monsoon and post monsoon period from October to February.

On a hot sunny day of 30 December 2019 at 10.35h, we sighted a Redback Spider, an adult female on a piece of rock. A silky cobweb was observed near the spider beneath the rock. Another mature female spider of the same species was sighted within two meters from the previous individual. Photographic documentation was done in the field. The spiders were handled with caution during photographic documentation as the author was aware that the spider belongs to black widow spider family even though not sure about its

species identity. The spiders were later identified to be *L. hasselti* with the help of illustration and descriptions in the literature (Pocock 1900; Goyal & Malik 2017).

The present record from Kiluvamalai, representing the southern part of the Eastern Ghats in Tamil Nadu is about 215 km southward from Coimbatore, the recent past record from Tamil Nadu along the Western Ghats. Kiluvamalai is separated from Palani Hills of Western Ghats by 30 km and forms a part of the discontinuous hills that includes Sirumalai. Perumalai, Alagar Hills, and Karanthamalai running along the southern Eastern Ghats (Narayanan 2016). This is the first report of L. hasselti in the Eastern Ghats of India and the second report in Tamil Nadu (being the southernmost occurrence of this species in India).

References

Daniel, J.C. & P.W. Soman (1961). Observations on the spider Latrodactus hasseltii indicus Simon with a note on arachnidism. Journal of the Bombay Natural History Society 58(3): 823–826.

Goyal, V. & V. Malik (2017). The first record of the redback spider Latrodectus hasselti Thorell (Araneae: Theridiidae) from Haryana, north India. Journal of Environment and Bio-Sciences 31(2): 441-442.

Hippargi, R.V., P.M. Bolde, S.V. Manthen & A.R. Shaikh (2012). Ecology of venomous spider Latrodectus hasselti Thorell, 1870 (Araneae:Theridiidae) from Solapur and Osmanabad District, Maharashtra. Indian Journal of Arachnology 1(1): 169–174.

Kananbala, A., K. Manoj, M. Bhubaneshwari, A. Binarani & M. Siliwal (2012). The first report of the widow spider *Latrodectus elegans* (Araneae: Theridiidae) from India. *Journal of Threatened Taxa* 4(7): 2718–2722. https://doi.org/10.11609/JoTT.o3152.2718-22.

Kumar, M.G. & M. Siliwal (2005). Range extension of *Latrodectus* hasselti Thorell, 1870 (Araneae: Theridiidae). *Zoos' Print Journal* 20(11): 2072.

Levi, H.W. (1959). The spider genus Latrodectus (Araneae, Theridiidae). Transactions of the American Microscopical Society 78 (1): 7–43.

Narayanan, T.B. (2016). Birds of Alagarkovil range, Dindigul District, Tamil Nadu. *Indian Birds* 12(4&5): 119–127.

Parasharya, B.M., R.V. Vyas & B.H. Patel (2015). Status and distribution

of red-backed spider, *Latrodectus* hasselti Thorell (Araneae: Theridiidae) in Gujarat State, Western India. *Journal of Biological Control* 29(4): 171–178.

Patel, B.H. (1973). Some interesting theridiid spiders (Araneae: Theridiidae) from Gujarat, India. *Bulletin of British Arachnological Society* 2(8): 149-152

Pocock, R.I. (1900). The fauna of British India, Archnida. Taylor and Francis, London, 279 pp.

Schmidt, G. & P. Klaas (1991). Eine neue *Latrodectus* Spezies aus Sri Lanka (Araneida: Theridiidae). *Arachnologischer Anzeiger* 14: 6–9.

Shrestha, B. & T. Dorr (2020). First records of the black widow spider *Latrodectus elegans* Thorell, 1898 (Araneae: Theridiidae) from Nepal. *Journal of Threatened Taxa* 12(10): 16385–16388. https://doi.org/10.11609/jott.5796.12.10.16385-16388.

Shukla, S. & V.G. Broome (2007). First report of the brown widow spider, *Latrodectus geometricus* C.L. Koch (Araneae: Theridiidae) from India. *Current Science* 93: 775–777.

Siliwal, M. & D. Kumar (2001). First report of the brown widow spider, Latrodectus geometricus C. L. Koch (Araneae: Theridiidae) from India. Current Science 81: 1170-1171.

Simon, E. (1897). Arachnides recueillis par M.M. Maindron a Mascate, en octobre 1896. Bulletin du Museum (national) d'histoire naturelle, Paris 1897: 95–98.

Srinivasulu, C., B. Srinivasulu, S.M.M. Javed, M. Seetharamaraju, S.A. Jyothi, C.A. Srinivasulu & F. Tampal (2013). Additions to the araneofauna of Andhra Pradesh, India - part II. Records of interesting species of the combfooted genera *Latrodectus*, *Rhomphaea* and *Coleosoma* (Araneae: Theridiidae). *Journal of Threatened Taxa* 5(10): 4483–4491. https://doi.org/10.11609/JoTT.o2660.4483-91

Tikader, B.K. (1987). *Handbook of Indian spiders*. Zoological Survey of India, Calcutta.

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