

Distribution record of *Cricula Silkmoth* in Nilgiris, India

Cricula trifenestrata Helfer, 1837 is a wild lepidopteron sericigenous moth known for its lustrous golden cocoon. *C. trifenestrata* is a silk-producing wild insect in India and produces an open-ended 'net-like' cocoon of beautiful golden yellow colour. The silk is rich in luster and is used for making spun silk. *C. trifenestrata* is one of the most destructive pests of mango and destroys 13–51% of its leaves (Ahmad & Alam 1994). It also infests cinnamon, cardamom, cashew, and plantation crops (Ahmad & Ahmad 1991; Das et al. 1999; Sujata & Anand 2003; Yadav & Kumar 2003; Pal & Medda 2006). *C. trifenestrata* is widely distributed in south Asian countries. *C. trifenestrata* is reported to be predominant in India, Andaman, Myanmar, Vietnam, Cambodia, Malaysia, Singapore, Thailand, Bangladesh, Java, and the Philippines countries (Tikader



Cricula trifenestrata. © Anbazhagan Abinesh.

et al. 2014). This note represents the distribution record of *C. trifenestrata* in Nilgiris, Tamil Nadu, India.

On 02 May 2022 at 0222 h, we observed three individuals of *C. trifenestrata* during the herpetofauna nocturnal survey in Gudalur area (11.4889 N, 76.3339 E; 1,014 m) Nilgiris, Tamil Nadu, India. We used iNaturalist, which is a citizen-based species distribution

mapping website-based application to obtain the distribution records of *C. trifenestrata* as well as past literatures in India (Tikader et al. 2014; Hridya et al. 2021). In total, 100 records were observed in 17 states in India. High numbers of records were observed in Kerala (N = 25 observations) followed by Assam (N = 13), Karnataka (N = 10), Tamil Nadu (N = 8), and West Bengal (N = 7). On the other hand, a low number of



Cricula trifenestrata distribution in India.

records were observed in Andaman & Nicobar Islands, Meghalaya, Andhra Pradesh, and Odisha, each one record respectively. Elevation wise, the species showed a significant variation in distribution. The lowest elevation record was 1 m and the highest elevation record was 5,658 m. The average elevation record was 980.09 m in India. In the southern Indian region, *C. trifenestrata* was found majoritively distributed in the Western Ghats region most of the records observed in Kerala (N = 25 observations) followed by Karnataka (N = 10), and Tamil Nadu (N = 8).

In Tamil Nadu, five out of eight records were observed only after the south of the Palghat

gap of the Western Ghats region. The average elevation record of *C. trifenestrata* in the Tamil Nadu region was 572.05 m. Singh (1992) reported that *C. trifenestrata* was recorded at an altitude of 1,097 m in some parts of Tamil Nadu. In the southern Indian region *C. trifenestrata* is mostly recorded in the hilly terrain region. Moreover, out of 100 records, most of the records (N = 75) were observed in the hilly terrain regions in India. This study confirms that the distribution of *C. trifenestrata* is mostly in the hilly terrain regions in India with above 900 m elevation. The present record showed *C. trifenestrata* was also distributed



Cricula trifenestrata distribution in Western Ghats, southern India.

above the Palghat gap of the Western Ghats regions of Tamil Nadu. This observation shed light on moth diversity in Nilgiris. Further studies are highly warranted to understand the proper distribution pattern of this species in the Tamil Nadu region as well as the Nilgiris.

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