

SIGHTING OF NILGIRI LARGE BURROWING SPIDER *Haploclastus nilgirinus* Pocock, 1899 FROM NILGIRIS, WESTERN GHATS, INDIA

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ABSTRACT

Nilgiri Large Burrowing Spider *Haploclastus nilgirinus* Pocock, 1899 recently recorded from the Nilgiris in the Western Ghats.

Key words: *Haploclastus*, Nilgiri, Western Ghats, burrowing spider.

INTRODUCTION

Spiders are an important group of generalised predators in the world. They are the largest order of Arachnids and rank seventh in the total species diversity among all the other groups of organisms (Sebastian & Peter, 2009). As many as 43678 spider species are known in the world (Platnick, 2012) and in India, 1685 spider species from 438 genera have been reported till date (Keswani *et al.*, 2012). The present knowledge on the spiders of Western Ghats remains confined to the works of Pocock (1900), Hirst (1909), Gravely (1935), Sherriffs (1927), and Sinha (1951). Recently Smith (2004), Sugumaran *et al.*, (2005), and Wankhade *et al.* (2012) tried to document the diversity of spider fauna in and around Western Ghats. Due to the high species endemism, Western Ghats are listed in the 34 ‘Biodiversity Hotspots’ of the world (Mittermeier *et al.*, 2005). This present note discusses the poorly known Nilgiri Large Burrowing Spider *Haploclastus nilgirinus* Pocock, 1899 from Nilgiris, Western Ghats.

On 28th May 2017, 4:30 pm., we found the Nilgiri Large Burrowing Spider *Haploclastus nilgirinus* from Coonoor, The Nilgiris, Western Ghats, location: Lat: 11° 21,124'N Long: 76 47,183'E. It was identified as belonging to the genus *Haploclastus* of the family Theraphosidae based on the presence of a distinct maxillary heel, the apical segments of the PLS being digit form, the presence of claw tufts and absence of a rastellum (Dippenaar-Schoeman, 2002). Family Theraphosidae is characterized as medium sized to very large mygalomorph spiders. Sub-family: Thrigmopoeinae has inner surface of maxilla furnished with simple scattered needle like bristles, and live in burrows in the tree grounds. Genus *Haploclastus* Simon, 1892 is endemic to India and is represented by six species, namely *Haploclastus cervinus* Simon, 1892, *H. kayi* Gravely, 1915, *H. nilgirinus* Pocock, 1899, *H. satyanus* Barman, 1978, *H. tenebrosus* Gravely, 1935 and *H. validus* (Pocock, 1899) and recently Prasanth & Jose (2014) described a new species namely *Haploclastus devamatha* the theraphosid spider from Kulathupuzha reserve forest of Western Ghats. The Nilgiris is connective junction for Eastern Ghats and Western Ghats with high endemism. The spider diversity is poorly studied in the Nilgiri region, recently Jayaraman Dharmaraj *et al.* (2017) reported a total of 40 species of spiders belonging to 36 genera and 11

families in Nilgirs. In their study, there is no information about the *Haploclastus nilgirinus*. Type locality of *Haploclastus nilgirinus* is Nilgiri Hills and also found in Savarimullay, Vandiperiyar, Travancore and Kerala in India. The habitat alteration and global warming are possible causes for poor sighting of this species. The present observation reflects that more scientific study is needed for this species on future.

Species Description

Spider shows sexual dimorphism, the males are much smaller than the females. Color of the carapace black, clothed limbs and abdomen with brownish-yellow hairs (Figure 3), sternum, coxae, and lower side of femora at least of 1st and 2nd legs with velvety black hairs (Figure 3). Body length is 6 cm, eight small eyes grouped in a cluster (Figure 2), the stridulating organ consists of a small cluster of hair-like and spatulate bristles adjoining the basal part of the scopula of the chelicerae, and of bristles scattered over the anterior face of the coxa of the palp which are hair-like distally and ventrally but more spiny form basally and dorsally. Length of carapace almost equal to patella and tibia of 1st leg, slightly greater than those of 2nd and of 4th longer also than protarsus and tarsus of 4th. Patella and tibia of 2nd legs slightly longer than that of 4th (Figure 1).

Species Distribution

India: Nilgiri hills (Pocock, 1899, Pocock 1900); Savarimullai in Vandiperiyar, Travancore.

Mygalomorph spiders are popularly regarded as poisonous, authentic records of their bites seem to be rare. The Madras Museum contains a single, somewhat damaged specimen of this immense species *Haploclastus nilgirinus*, collected by Mr. S. Ananda Rao from Savarimullay, Vandiperiyar, Travancore, where it had bitten a coolie.

Regarding the *H. nilgirinus* bites Mr. Ananda Rao writes: "The bite on the coolie was quite a severe one and was inflicted on the fore-finger. When he was brought to me, which was almost immediately after the bite, I noticed that the bitten spot was bleeding and the finger, as also the palm, had swollen. He was also complaining of severe twitching pain extending up to the shoulder. The wound was treated in the usual way, *i.e.* washing with a lotion of potassium permanganate, an application of tincture of iodine and dressing. His pain and swelling persisted for three days, after which it subsided. But, curiously enough, even now after a lapse of nearly six months since the occurrence, he states that he has no proper sensation in that finger and that it gets very easily benumbed when the hand is wet. Venom probably strong. Depending location of the bite and the amount of venom released this might be a painful experience."

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Figure 1 *Haploclastus nilgirinus* Male. 2nd legs slightly longer than of 4th (Pocock, 1899).



Figure 2 Eight Small Clustered Eyes.



Figure 3 Limbs, Cephalothorax & Abdomen with brownish yellow hairs.