

**RE-DESCRIPTION OF LITTLE KNOWN  
THERAPHOSID SPIDER,  
*Chilobrachys assamensis* HIRST, 1909.**

**Seema Keswani and Ganesh Vankhede**

Department of Zoology, SGB Amravati University, Amravati-44602  
keswaniseema10@gmail.com; vganeshan2001@rediffmail.com

**ABSTRACT**

The genus *Chilobrachys* Karsch, 1891 is so far represented by eleven species from India: *andersoni* (Pocock, 1895); *assamensis* Hirst, 1909; *femoralis* Pocock, 1900; *fimbriatus* Pocock, 1899; *flavopilosus* (Simon, 1884); *fumosus* (Pocock, 1895); *hardwickei* (Pocock, 1895); *himalayensis* (Tikader, 1977); *khasiensis* (Tikader, 1977); *stridulans* (Wood Mason, 1877) and *thorelli* Pocock, 1900.. The distribution of *C. assamensis* is considered to be restricted to its type locality Assam and recently, it misinterpreted as deadly venomous. In this paper, we are redescribing it in detail after Hirst, 1909.

**Keywords:** Mygalomorph, redescription, taxonomy, Theraphosidae, *Chilobrachys assamensis*.

**INTRODUCTION**

The family Theraphosidae is very large and includes 124 genera and 946 valid species in the world, however, from India 12 genera and 53 species are known (Platnick 2013). They are of medium to large size species, Most of them inhabit a ground burrow but few of them live in holes in trees. The description of the male and female *C. assamensis* is based on the specimens received from Assam.

**Diagnosis:** Body and legs dark brown color with a reddish-orange tinge, carapace longer than wide, longer than patella and tibia of palp, eye tubercle low, clypeus wide, fovea slightly procurved, eyes eight, anterior row slightly procurved and posterior row recurved, AME are slightly bigger than ALE; PME are smaller than PLE; AME are placed apart from each another than from ALE, ALE and PLE are closer to each other.

***Chilobrachys assamensis* Male (Plate-1):**

**Color:** Body and legs dark brown in color with a reddish orange tinge, dorsum of body little pale in color.

**Carapace:** Dark brown in colour, longer than wide, 9.26 mm long and 7.70 mm wide, longer than patella and tibia of palp and approximately equal to length of metatarsus of leg IV, clypeus absent, fovea slightly procurved.

Theraphosid spider, *Chilobrachys assamensis* ..... Keswani and Vankhede

**Eyes:** Eight, present on low tubercle, anterior row slightly procurved, AME are slightly bigger than ALE, AME are placed apart from each another than from ALE. Posterior row of eyes slightly recurved. ALE and PLE are closer to each other; PME and PLE are closed to each other than AME and PLE.

**Chelicerae:** Dark brown in colour, outer face of chelicerae hirsute, setae are arranged in rows, eleven teeth present promarginally (Plate-1), stridulatory organ present, rastellum absent on the anterior portion of paturon, thick irregular scopulae present on retromargin.

**Endite:** Anterior lobe well developed into conical process, covered with numerous cuspules, serrula absent, clavate trichobothria present on maxillae, maxillary lyra present on promargin of endite (Plate-1).

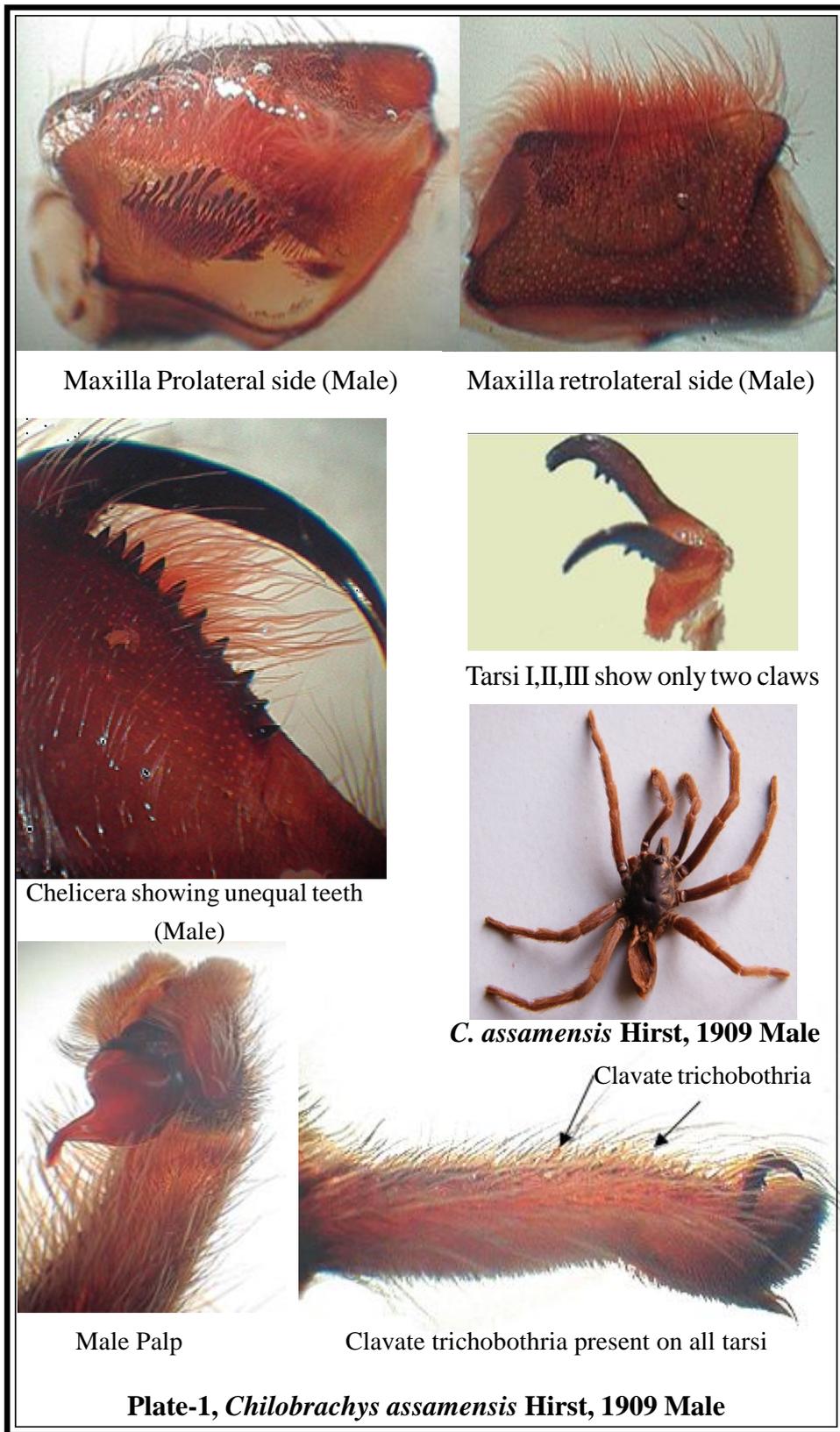
**Labium:** Wider than long, cuspules present on anterior 3<sup>rd</sup> portion of labium, labium in male does not have stiff setae.

**Sternum:** Golden brown in colour with one pair of sagilla near to the III<sup>rd</sup> coxa, covered with small grey hairs, fused with labium, longer than wide, posteriorly terminates before 4<sup>th</sup> coxae.

**Legs:** Leg formula- 4,1,2,3, all legs are numerously covered with hairs tarsi and metatarsi of all legs scopulated along their entire length, scopulae of metatarsi and tarsi of leg IV<sup>divided</sup> by two rows of setae, tarsi of all legs have two serrated claws with 4 prominent median teeth except the IV<sup>th</sup> tarsi on which 3 claws are present, claws are surrounded by dense iridescent claw tufts. The third claw is small, hooked, nonserrated and ventrally placed in between the bases of claw tufts 12-15 clavate trichobothria present on tarsi I and IV are in the range of 12-15 and on tarsi II and III, filiform trichobothria are also present on the tarsi and metatarsi in between, distal end of metatarsi III and IV have two ventral and two lateral, thick, strong spines, II<sup>nd</sup> metatarsi have 2 ventral spines which are absent on the metatarsi I.

**Abdomen:** Longer than wide, covered with hairs, brown coloured, two pairs of spinneretes,

**Palp:** Cymbium bifurcated, hirsute, setae on cymbium with a metallic sheen, palp conch shaped with coniform distal sclerite, embolus short with a spiral twist, a distinct keel running from the bulb along the embolus.



**Table-1: Morphometry of legs and palp of male *Chilobrachys assamensis* Hirst, 1909.**

Leg segments	Leg I	Leg II	Leg III	Leg IV	Palp
Coxa	4.50	3.47	3.40	3.54	—
Trochanter	1.78	1.78	1.41	2.03	1.70
Femur	8.44	8.07	5.99	9.44	6.31
Patella	4.74	4.20	4.20	4.47	2.88
Tibia	7.53	6.75	8.83	7.90	5.78
Metatarsus	6.06	5.60	5.75	9.24	—
Tarsus	4.77	4.67	4.62	5.62	1.80
Total length	37.82	34.54	34.20	42.24	18.47

All the measurements are in mm.

***Chilobrachys assamensis* Female (Plate-2):**

**Carapace:** Dark brown in colour, longer than wide, 10.77 mm long and 7.78 mm wide, nearly equal to the length of patella and tibia of I<sup>st</sup> leg and metatarsus and tarsus of leg IV, clypeus absent, fovea slightly procurved.

**Eyes:** Eight, present on low tubercle, anterior row slightly procurved, AME are slightly bigger than ALE, AME are placed apart from each another than from ALE. Posterior row of eyes slightly recurved. ALE and PLE are closer to each other, PME and PLE are closed to each other than AME and PLE.

**Chelicerae:** Dark brown in colour, outer face of chelicerae hirsute, setae are arranged in rows. eleven teeth present promarginally, stridulatory organ present, rastellum absent on the anterior portion of paturon, thick well developed irregular scopulae present on retromargin.

**Endite:** Anterior lobe well developed into conical process, covered with numerous cuspules, serrula absent, clavate trichobothria present on maxillae, well developed maxillary lyra present on promargin of endite (Plate-2).

**Labium:** Wider than long, anteriorly labium is covered with stiff setae on either side, its anterior 3/4<sup>th</sup> region possesses cuspules.

**Sternum:** Golden brown in colour with one pair of sagilla near to the III<sup>rd</sup> coxa, covered with small grey hairs, fused with labium, longer than wide, ends before the 4<sup>th</sup> coxae.

**Legs:** Leg formula- 4,1,2,3, all legs are numerously covered with hairs tarsi and metatarsi of all legs scopulated along their entire length, scopulae of metatarsi and tarsi of leg IV divided by two rows of setae, tarsi of all legs have two serrated claws with 4 prominent median teeth except the IV<sup>th</sup> tarsi on which 3 claws are present, claws are surrounded by dense iridescent claw tufts. The third claw is

Theraphosid spider, *Chilobrachys assamensis* ..... Keswani and Vankhede



Maxilla Prolateral side (Female)



Maxilla retrolateral side (Female)



Chelicera showing unequal teeth (Female)



Tarsi I,II,III show only two claws

*C. assamensis* Hirst, 1909 (Female)



*C. assamensis* Hirst, 1909 (Male)



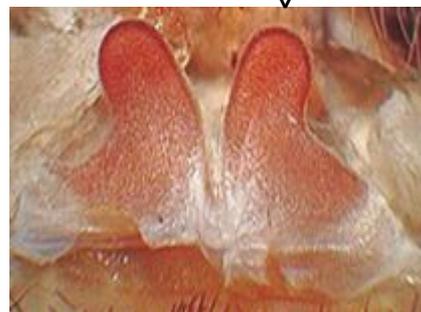
Clavate trichobothria

Clavate trichobothria present on all tarsi

Spermathecae



*C. assamensis*  
Hirst, 1909  
Female



**Plate-2, *Chilobrachys assamensis* Hirst, 1909 Female**

Theraphosid spider, *Chilobrachys assamensis* ..... Keswani and Vankhede

small, hooked, nonserrated and ventrally placed in between the bases of claw tufts 12-15 clavate trichobothria present on tarsi I and IV are in the range of 12-15 and on tarsi II and III, filiform trichobothria are also present on the tarsi and metatarsi in between, distal end of metatarsi III and IV have two ventral and two lateral, thick, strong spines, II<sup>nd</sup> metatarsi have 2 ventral spines which are absent on the metatarsi I.

**Table-2: Morphometry of legs and palp of female *Chilobrachys assamensis* Hirst, 1909.**

	Leg I	Leg II	Leg III	Leg IV	Palp
Coxa	4.6	3.76	3.22	3.89	—
Trochanter	1.56	1.56	1.78	1.98	1.14
Femur	7.31	5.82	5.67	6.70	5.73
Patella	4.67	4.11	3.03	4.16	3.19
Tibia	6.09	4.28	3.47	5.82	4.36
Metatarsus	4.18	3.98	4.55	6.55	—
Tarsus	3.89	3.50	3.45	4.18	4.24
Total	32.3	27.01	25.17	33.28	18.66

All the measurements are in mm.

**Abdomen:** Longer than wide, covered with hairs, brown coloured, two pairs of spinneretes,

**Female genitalia:** Spermathecae simple, pink coloured paired and unbranched at distal end, broad at base with rounding apically bent outwardly.

**Abbreviations:** ALE - Anterior lateral eye; AME - Anterior Median Eye; PLE - Posterior lateral eye; PME - Posterior median eye.

#### REFERENCES

- Barman M. 1978.** A new mygalomorph spider of the genus *Phlogiodes* from Khasi-Jaintia Hills, India (Araneae: Theraphosidae). *J. Bombay Natural History Society*, 75:168–169.
- Dippenaar-Schoeman A.S. 2002.** Baboon and Trapdoor Spiders of Southern Africa: An Introduction Manual. Plant Protection Research Institute Handbook No. 13, Agricultural Research Council, Pretoria, 128 pp.
- Hirst, A. S. 1909.** On some new or little-known mygalomorph spiders from the Oriental Region and Australasia. *Rec. Ind. Mus. Calc.* 3(4:30): 383-390.
- Platnick, N. I. 2013.** The world spider catalog, version 13.5. American Museum of Natural History, online at <http://research.amnh.org/iz/spiders>
- Pocock R.I. 1899.** Diagnosis of some new Indian Arachnida. *J. Bombay Natural History Society*, 12: 744–753.
- Pocock R.I. 1900.** The fauna of British India, including Ceylon and Burma. Arachnida. *Taylor & Francis*, London, 279 pp.
- Raven R.J. 1985.** The spider infraorder Mygalomorphae (Araneae): Cladistics and systematics. *Bull. Amer. Mus. Nat. Hist.*, 182: 1–180.
- Tikader B.K. 1977.** Studies on some mygalomorph spiders of the families Ctenizidae and Theraphosidae from India. *Journal of the Bombay Natural History Society*, 74: 306–319.