

## FIRST RECORD OF *MACRACANTHA ARCUATA* FABRICIUS, 1793 (ARANEAE: ARANEIDAE) FROM ASSAM, INDIA

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### web supplement

Twelve species of Genus *Gasteracantha* (Araneidae) are found in India (Platnick, 2004). Dahl (1914) considered *Gasteracantha arcuata* Fabricius, 1793 under subgenus *Macracantha* of genus *Gasteracantha* Sundevall, 1833. Emerit (1974) elevated it to a genus, which is followed by Platnick (2004) in his catalogue of the spiders of the world. *Macracantha arcuata* Fabricius, 1793 (Araneidae) is the only representative of this genus and occurs in India and from China to Borneo (Myanmar, Thailand, Malaysia, Singapore and Indonesia) (Pocock, 1900; Tikader, 1982; Koh, 1996; Platnick, 2004).

In India, *Macracantha arcuata* is reported from Shillong in Meghalaya and Sikkim (Tikader, 1982; Biswas & Majumder, 1995, Platnick, 2004). On a trip to the Gibbon Wildlife Sanctuary (26°41'6.0"N & 94°21'6.2"E, elevation 136m), Jorhat, Assam on 21 October 2002 the first two authors observed many webs of *Nephila pilipes* Fabricius, 1793 (Tetragnathidae) along the entire stretch of 2.5 kms from the railway crossing (Ranger's Office) to the Gibbon pool. This tropical wet evergreen forest famous for the Western Hoolock Gibbon *Bunopithecus hoolock hoolock*, is home to *Macracantha arcuata*. The orb webs of this species were seen commonly along with the *Nephila* webs and in two instances adult females were seen resting under the nearest leaf anchoring one of the radiating web strands. Although many webs we sighted were empty, we presume that the females rested under leaves rather than wait in the hub of the orb like many *Gasteracantha* species.

The spider was identified as *Macracantha* from photographs taken from the site (Image 1<sup>w</sup>). Although the photographs were not very good, the spider was still identified using available descriptions from literature such as Pocock (1900), and Tikader (1982), and from a photograph published by Koh (1996). Unique characteristics differentiate this species from other closely related and similar looking *Gasteracantha* species; in that the median spine is more than three times the width of the abdomen. The description provided by Tikader (1982) indicates the colour of the abdomen of the preserved specimen as being brown, while the colour photograph of a live specimen from Bukit Timah Nature Reserve, Singapore shown in Koh (1996) clearly shows the colour to be red. The individuals we saw were deep red with all other morphological characters such as the number and shape of sigilla, spines and other characteristics on both dorsal and ventral side matching.

The web was a typical orb-web three to four feet in diameter with conspicuous beads at the junction of the radiating and concentric strands. The web as such was conspicuously whitish, and slightly thicker than the gigantic orb-webs of *Nephila pilipes*. The number of conspicuous empty webs along with occupied *Nephila* webs piqued our interest in investigating further, when we saw this curved spiny spider under the leaves supporting one of the radial anchor strands.

*Macracantha arcuata* is a rare spider and has been reported in India only from Shillong and Sikkim although the Sikkim report seems to be very vague. The present sighting could be the first record for Assam with the distance from the last sighting in Shillong in Meghalaya being at least 330km northeast. This finding represents a new locality record for the monotypic species in India.

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<sup>w</sup> See Image 1 on the web at [www.zoosprint.org](http://www.zoosprint.org)