

On taxonomy and behavioural biology of ant mimicking jumping spider *Mymaplata plataleoides* O. Pickard-Cambridge, 1869 (Araneae: Salticidae)

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In present study, we have reported ant mimicking jumping spider *Mymaplata plataleoides* O. Pickard-Cambridge, 1869 from Northern Chhotanagpur Plateau region which is the first record of this species from the state of Jharkhand. Digital illustrations and descriptions of both male and female spiders, the female's exuviae, and description of its habitat are also presented. We have studied its moulting and feeding behaviour in detail, and have recorded various behavioural aspects like prey preference, mate preference, debris rolling behaviour, wet surface avoidance, structure of eggs, etc. which was never documented before.

We report hereby the occurrence of this spider near the colonies of ground nesting ant *Camponotus compressus* Fabricius, 1787 which is unusual because this spider is known to mimic Asian weaver ant *Oecophylla smaragdina* Fabricius, 1787. Specimens collected by us are darker than commonly reported materials and we suggest that the darker colouration may be an adaptation to co-exist with *C. compressus* which are also dark in colour

1 Materials and methods

IN SITU STUDY PIPELINE

- Site visit and survey
- Photography and videography of animal and its habitat
- On site studies of behaviour and habitat
- Study of photographs and videos
- Species identification and description

EX SITU STUDY PIPELINE

- Site visit and survey
- Sampling and collection
- Pinning and preservation
- Photography
- Dissection and microscopic studies
- Study of photographs and micrographs
- Species identification and description

2 Ant mimicking jumping spider *Myrmaplata plataleoides* O. Pickard-Cambridge, 1869 (Araneae: Salticidae)

Myrmaplata plataleoides O. Pickard-Cambridge, 1869 (female).

(A) Habitus of preserved specimen, dorsal view.
(B) Habitus of preserved specimen, ventral view.
(C) Epigyne, ventral view.
(D) Epigyne, dorsal view.
(E) Cephalothorax, exuvia displaying position of eyes in lateral view.
(F) Live spider.

Myrmaplata plataleoides O. Pickard-Cambridge, 1869 (male).

(A) Habitus of preserved specimen, dorsal view.
(B) Habitus of preserved specimen, ventral view.
(C) Palp, dorsolateral view.
(D) Palp, ventrolateral view.
(E) Live spider.

4 Moulting in *Myrmaplata plataleoides* O. Pickard-Cambridge, 1869 (Araneae: Salticidae)

Eggs of *Myrmaplata plataleoides* O. Pickard-Cambridge, 1869 (Araneae: Salticidae) at different magnifications

Different moults of *Myrmaplata plataleoides* O. Pickard-Cambridge, 1869 (Araneae: Salticidae): Female

Different moults of *Myrmaplata plataleoides* O. Pickard-Cambridge, 1869 (Araneae: Salticidae): Male

3 Ethology of *Myrmaplata plataleoides* O. Pickard-Cambridge, 1869 (Araneae: Salticidae)

Female exuvia Freshly moulted male with exuvia Female Male Model ant

Spiders feeding on leaf hoppers Raring setup Courtship Debris rolling

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