International Journal of Scientific Research in Multidisciplinary Studies

Vol.**10**, Issue.**3**, pp.**31-33**, March **2024** E-ISSN: 2454-9312 P-ISSN: 2454-6143 Available online at: www.isroset.org



Survey Article

A New Record of *Stick Insect Trachythorax sparaxis* (Westwood, 1859) from Tamilnadu, India

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Received: 26/Feb/2024; Accepted: 02/Mar/2024; Published: 31/Mar/2024

Abstract—Westwood depicted *Trachythorax sparaxes* in 1859 considering the two sexes from Sri Lanka. It is found in India and Sri Lanka. *Trachythorax sparaxes* is a sorts of stick bug, in the family *Trachythorax*. It is appointed a creature bunch in the family Diapheromeridae. A new record of *Trachythorax sparaxis* from Ariyalur area, Tamilnadu. This note given a scatterings and regular discernment.

Keywords— First record, new distribution, Trachythorax genus, south India

1. Introduction

Stick (known as strolling sticks) and leaf bugs structure the Phasmida, otherwise called Phasmatodea, Phasmaptera and Cheleutoptera. The name of the request gets from the Latin, 'Phasma'means apparition or phantom. The request is all around addressed in the tropical woods belt, dry backwoods and in meadows of the country. The Phasmida fauna of Indian subcontinent is still deficiently known. There is no monographic treatment of the Phasmida fauna of India. However these are many regards an exceptionally fascinating gathering of bugs, yet their review has been relatively ignored. Despite their quirks, tiny informations are accessible on Phasmida fauna of India. Indian Phasmida includes 154 species when contrasted with the Worldwide Phasmida is assessed around 2,794 species [3].

Phasmida are ordinarily known as stick bugs including the leaf bugs. The bugs are herbivorous and nighttime in propensity. With very little measures for self-preservation, they are best disguised in nature. They are likewise honored by a few idiosyncrasies like high fertility, gregarious nature, polyphagy and ability to recover lost body parts. Most species are apterous or with diminished wings especially for wings are unequivocally condensed[4].

Outrageous sexual dimorphism is the serious issue in the distinguishing proof of phasmids. Furthermore, old portrayals are generally short and once in a while the territory is questionable or not determined yet referenced of a geological region. There are loads of examples in numerous historical centers of the world which stayed unidentified because of multiple factors and generally significantly because of their

convoluted ordered characters[4] Here, the first-time record of stick insect *Trachythorax sparaxis* (Westwood, 1859) from Ariyalur district, Tamilnadu state, India.

2. Study area

The stick insect *Trachythorax sparaxis* [5] recorded from Vetriyur village in ariyalur district, Tamilnadu state, India. Members of the stick insect genus *Trachythorax* are distributed across Southeast Asia, India and southern China (Phasmid Species File). The present observation constitutes a new record of the genus, and of the species *Trachythorax sparaxis* [5] from Tamilnadu.

(https://www.inaturalist.org/observations/200999477 / March 2024).

Table 1. Scientific Classification

Domain	Eukaryota
Kingdom	Animalia
Phylum	Arthropoda
Class	Insecta
Order	Phasmatodea
Family	Lonchodidae
Genus	Trachythorax
Species	Trachythorax sparaxes
	(Westwood, 1859)

3. Biology

Species were found in various biotopes, going from mountain evergreen rainforests to dry and seriously upset natural surroundings. All species are able to do great flight. More often than not when a grown-up female is noticed, it is joined by a lot more modest male, and females can without much of a stretch fly shipping the connected guys on their backs. Guys likewise open their wings during trip in sex. The recorded species, stick insect *Trachythorax sparaxis*, Scientific classification mentioned in table 1.

4. General Observation Phasmida

The Phasmida are apathetic bugs, uncommonly guarded in their appearance. They are trying to see and assemble. These are moderate to gigantic estimated, and contrast from 30 to 325 mm long. The body structure regularly drag out and adjust and empty, even more only sometimes deterred; pronotum is short, the meson and metanotum typically stretch, the tergum of the later is solidly associated with first stomach part; and back sets of legs not modified for bouncing, the coxae are pretty much nothing, bone designs five segmented, and are habitually immensely diminished or missing; The wings are often phenomenally decreased or missing; the front wings (when present) generally speaking, are short, calfskin like tegmina; the back wings (when present) are fan-like and beating the tegmina. Waist has especially short, adjusted, un-segmented cerci (some time reached out in female). The male external genitalia are variable, yet even. The ovipositor of the female is short and complex. All Phasmida are phytophagus and most of them are evening time.

5. Distributions

Currently known from a wide range in South-east Asia: Sri Lanka, Bangladesh, Myanmar, Thailand, Vietnam, Cambodia, Peninsular Malaysia, Singapore, Indonesia (Sumatra and Java), southern China (counting Hainan) and Taiwan. India (Bihar, Sikkim, Tamilnadu); Sri Lanka.



Figure 1. Side view of Trachythorax sparaxis stick insect.



Figure 2. Showing a stick insect without one leg.



Figure 3.Stick insect in the tree mapping *Trachythorax sparaxis* (Westwood, 1859).

6. Observation of Stick insect

A stick bug was seen taking off from a tree limb. It flew in front of the giver and arrived on a close by mud lobster hill. A nearer examination uncovered a more modest person under the wings of the bigger individual and that the two were mating (Figs. 1, 2 and 3). The bigger model was around 10 cm in all out length. The taxonomy of the genus is currently

poorly resolved with several taxa, e.g. *T. chinensis* (Redtenbacher, 1908) from China (Sichuan), *T. expallescens* Redtenbacher, 1908 from Sri Lanka, *T. fuscocarinatus* Chen & He, 1995 from Hainan, *T. incertus* Redtenbacher, 1908 from Vietnam (North Vietnam), *T. longialatus* Cai, 1989 from China (Sichuan) and *T. unicolor* Redtenbacher[1].

7. Diagnosis

Body greenish brown; three dark middle and sidelong stripes noticeable, begins one from the occiput of the head as a middle carina one more two parallel carina from the rear of the eye to the furthest limit of mesonotum; head and body smooth, with no granules; head longer than broadness, somewhat restricted posteriorly, radio wires slim, base of the recieving wires somewhat longer than expansiveness, second antennal section somewhat more modest than preeciding one, others filiform and arrives at up to the fifth stomach fragment; eyes globular delivering Horizontally; pronotum more extensive than long; mesonotum somewhat limited posteriorly; metanotum somewhat limited anteriorly; stomach portion I-to 6 equivalent, eight section more modest than seventh section; supraanal plate with back edge somewhat sunken; cerci cylindrical and stretched out past the midregion; subgenital plate boat molded, summit distinctly adjusted; legs with spines, carina thickly setose; foremost femora and tibiae pretty much equivalent; mid and rear tibiae more limited than the comparing femora [2].

8. Conclusion

Rearing the parasites and hosts in controlled condition could provide interesting insights on the true identity of the parasite species and could shed light on their behaviour including the oviposition, the larval development and the function of the specialised structures of the stick insect eggs. Species of *Trachythorax*, as well as several closely related taxa (e.g. *Loxopsis*, *Asceles*, *Marmessoidea* and *Sypiloidea* sp.) are easy to rear in captivity considering the correct food plant is provided.

9. Recommendations

To need to more survey of stick insects in this location. This finding opens up new avenues to be explored in future studies, such as, for example, the reproductive compatibility among them, their phenotypic variability, and the cytogenetics, which are now being prepared, among other approaches.

Declaration: There is no competing interest amongst the writers.

Conflict of Interest: Authors have no conflict of interest.

Funding Source: The study has not received any external funding.

Authors' Contributions: The manuscript written by author, including data collection, literature and table, chat ,result and discussion etc...

Acknowledgement

The author thanks to helping for identification of stick insect. Joachim Bresseel, Royal Belgian Institute of Natural Sciences, O.D. Phylogeny and Taxonomy, Entomology, Vautier street 29, B-1000 brussels, Belgium.

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