



HELOPELTIS THEIVORA,

TEA MOSQUITO BUG

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The image features a dark blue background with white, stylized circuit board traces in the corners. These traces consist of lines and small circles, resembling electronic components or data paths. The main text is centered and written in a bold, white, sans-serif font.

Tea with its great popularity as beverage has drawn the attention of agronomists, plant protectionists, and management experts for its sustainable growth in future and as a drink that is safe for young and old alike

India is the second largest producer of tea and fourth in foreign export. Insect and mite pests (arthropods) are the most destructive, resulting in 5%–55% crop loss.

Helopeltis theivora,

Helopeltis theivora, or the tea mosquito bug, is a major sap-sucking pest of tea, causing significant damage via nymphs and adults puncturing young shoots, leading to reddish-brown spots.

Morphology of *Helopeltis theivora*

- **Adults:** Slender insects (6-8 mm long) with a distinct red thorax, black-and-white abdomen, and greenish-brown wings.
- **Key Feature:** A characteristic knobbed, club-shaped spine on the scutellum is a defining diagnostic feature.

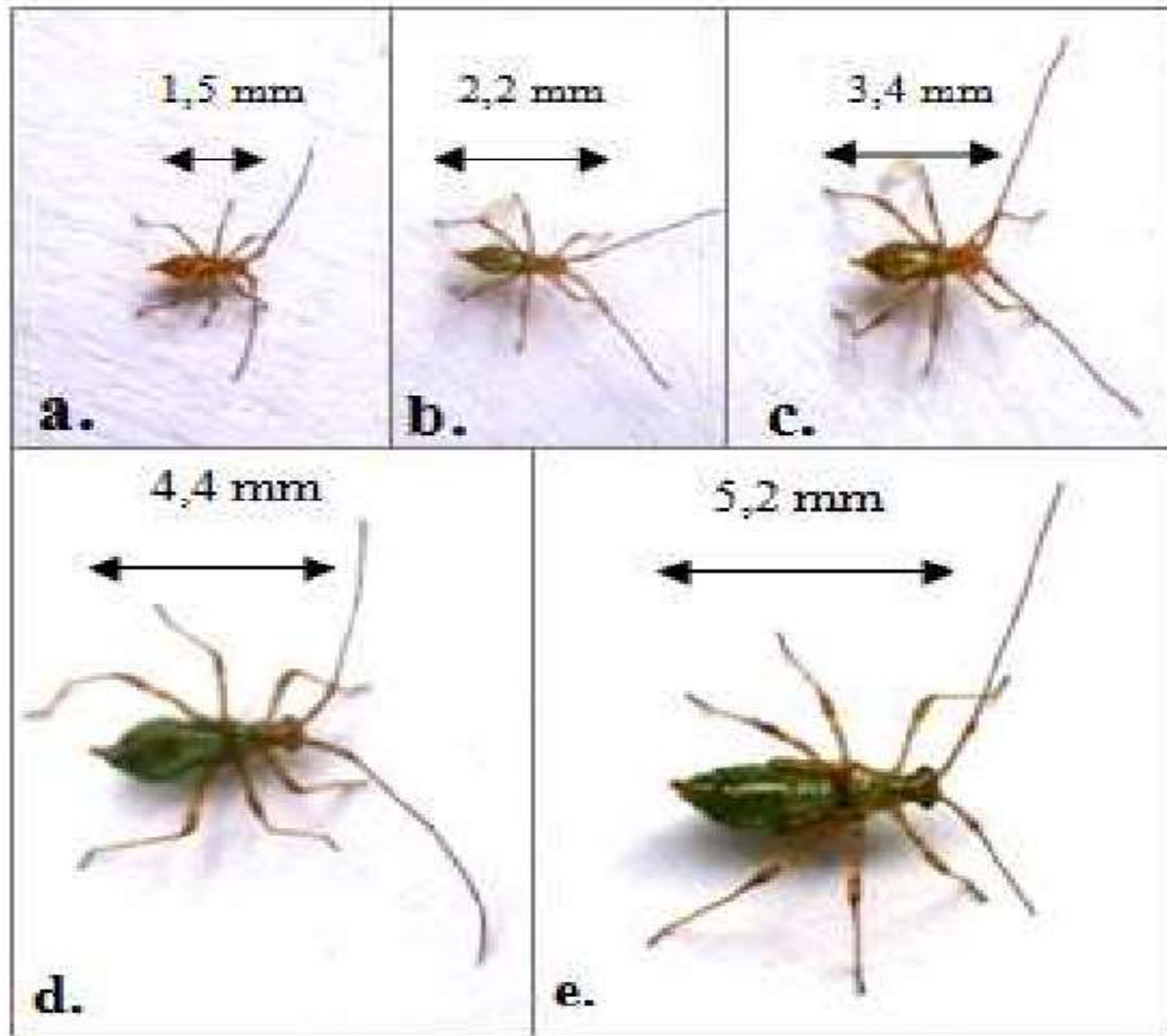


Figure 1. Nymphs of *H. theivora*: a. 1st instar, b. 2nd instar, c. 3rd instar, d. 4th instar, e. 5th instar.

Antennae: Four segments—scape, pedicel, flagellum I, and flagellum II—with antennae length about twice the body length.

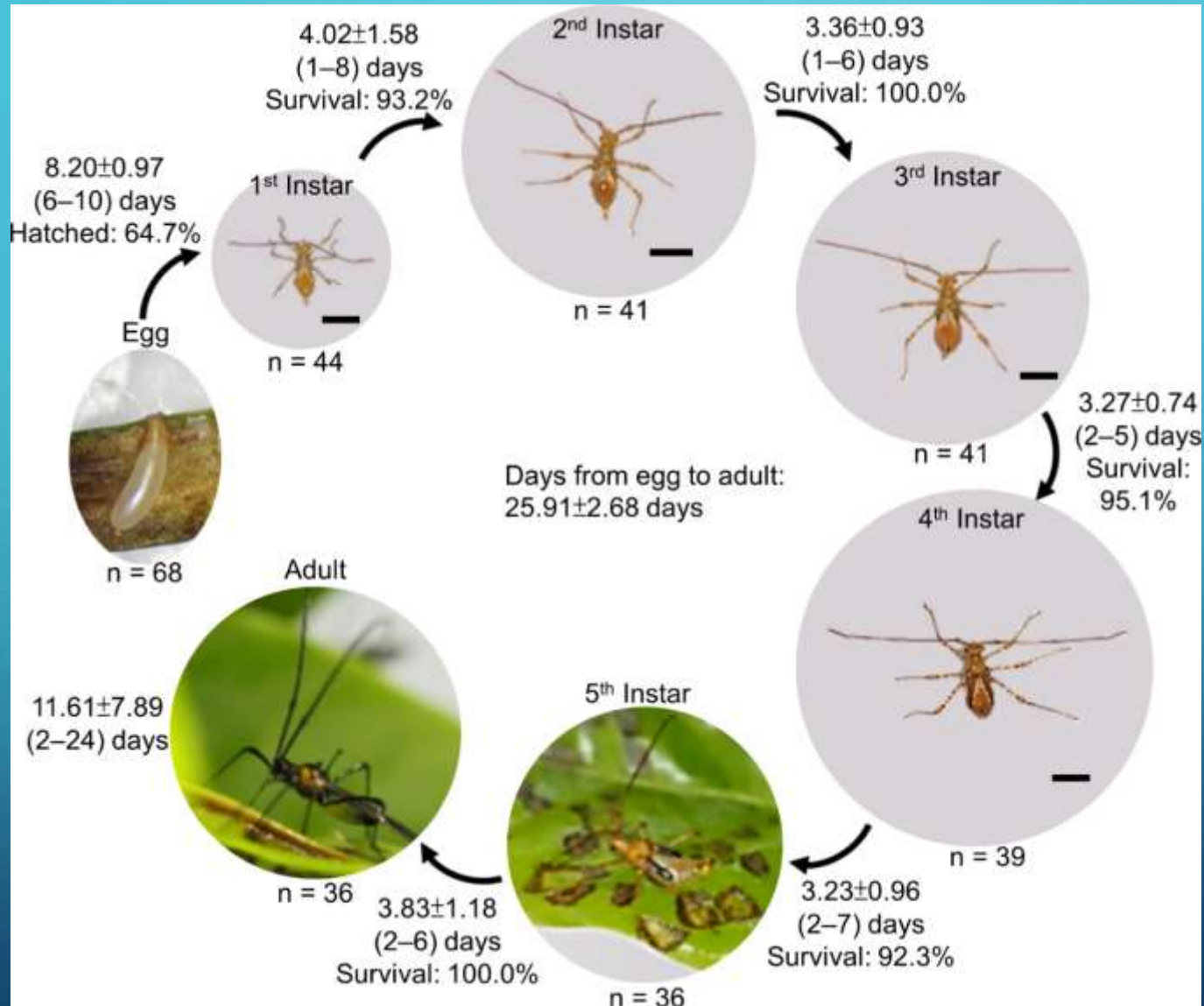
Nymphs: "Spider-like" in appearance due to delicate, long legs. They are generally yellowish-brown and pass through five instars (moult) before maturity.



Mouthparts: Needle-like rostrum used to pierce tissue and inject toxic saliva.

Life Cycle and Biology

The life cycle is completed in roughly 15-20 days in summer and 45-60 days in winter, with several generations per year.

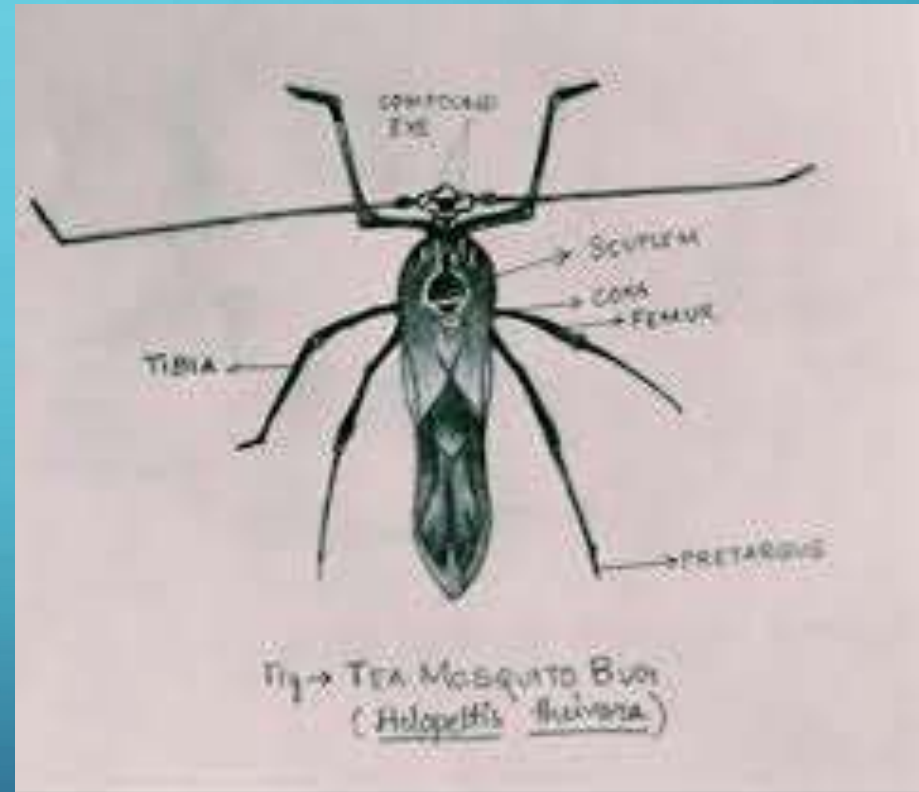


Egg:

Females deposit 500+ elongated, sausage-shaped eggs singly or in groups, primarily into the soft tissue of young tea leaves, petioles, and tender stems. Eggs have two long filaments protruding from the plant tissue. Incubation lasts 5-7

Nymphs:

Hatching results in five nymphal stages (instars). Nymphs are active feeders, sucking sap from young shoots, which causes them to dry up. This stage lasts 9-10 days in summer and 25-29 days in winter.



Adults:

Mating occurs shortly after emergence. Females lay eggs starting two days post-copulation. Adults can live for several weeks and tend to hide in the shade.



Damage Symptoms

Punctures: The feeding site appears as a reddish-brown, circular spot.

Shoot Distortion: Heavy feeding causes young leaves to curl and turn black, with severely affected bushes appearing burnt or "scorched".

Yield Loss: Intense infestations result in significant reductions in pluckable tea shoots



- **Adults and nymphs suck the sap from buds, young leaves and tender stems**
- **Puncturing the plant tissues with their needle like rostrum and inject toxic saliva.**
- **Punctures appear as reddish brown spots.**
- **Leaves curl up, badly deformed and shoots dry up.**



References:

1. Characterization of feeding damage by tea mosquito bug, *Helopeltis theivora* Waterhouse (Hemiptera: Miridae) on Hainan Dayezhong tea cultivar

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2.. Morphological and Ultrastructural Characteristics of Tea Mosquito Bug Antennae, *Helopeltis theivora* Waterhouse (Hemiptera: Miridae) from Hainan, China

[Wenhui Li](#)^{1,2,3}, [Yonglin Liao](#)⁴, [Zhufeng Lin](#)^{1,2}, [Xuncong Ji](#)^{1,2,3,*}, [Qi Yao](#)^{1,2},

3. <https://www.koppert.in/plant-pests/bugs/tea-mosquito-bug>

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5. Life Cycle and Damage Patterns of Tea Mosquito Bug (*Helopeltis theivora* Waterhouse), a Newly Recorded Pest on Arabica Coffee in Northern Thailand
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