



North-East Twinning Program- Key characteristics of Green leaf hopper from North- East under foldscope- #Indiafoldscopephase1

SOUMITRA BANERJEE

READ REVIEWS

WRITE A REVIEW

CORRESPONDENCE:
sb2.foldscope@gmail.com

DATE RECEIVED:
November 28, 2018

© Banerjee This article is distributed under the terms of the [Creative Commons Attribution 4.0 International License](#), which permits unrestricted use, distribution, and redistribution in any medium, provided that the original author and source are credited.



Rice Green Leafhoppers

Scientific names: *Nephotettix virescens*, *N. nigropictus*, *N. cincticeps*

Manipuri name: *Marek asangbi*

The green rice leafhopper is one of the most devastating insects of cultivated rice (*Oryza sativa* L.) and distributed widely in Asia. They not only cause damage by sucking sap from phloem and xylem of susceptible cultivars causing a typical damage symptom known as hopper burn when populations are high, but also by transmitting viruses such as the rice tungro, rice dwarf, rice transitory yellowing and the yellow dwarf as a vector. Rice plants are most sensitive to the green leafhoppers at both seedling and booting stages. The sucking and oviposition by the leafhoppers make plants dwarfish or stunted. It causes feasible condition to the plants for the infection by either fungi or bacteria, or both of them. Heavy infestation around the booting to the heading stages makes the rice plants necrotic and often leads severe yield losses in rice.

Morphological characteristics (as observed under foldscope)

- Entire body is wedge-shaped, bright green about 3 mm in size with varying dark spots depending on species
- Antennae is short, thin and bristle-like (Fig 1)
- Fore wing is smooth and with green annal veins and dots (Fig 2)
- Hind wing with annal veins forming a unique shapes (Fig 3)
- Double row of spines running along the tibia of hind legs (Fig 4)



Fig. 1: Antenna of green leaf hopper under foldscope

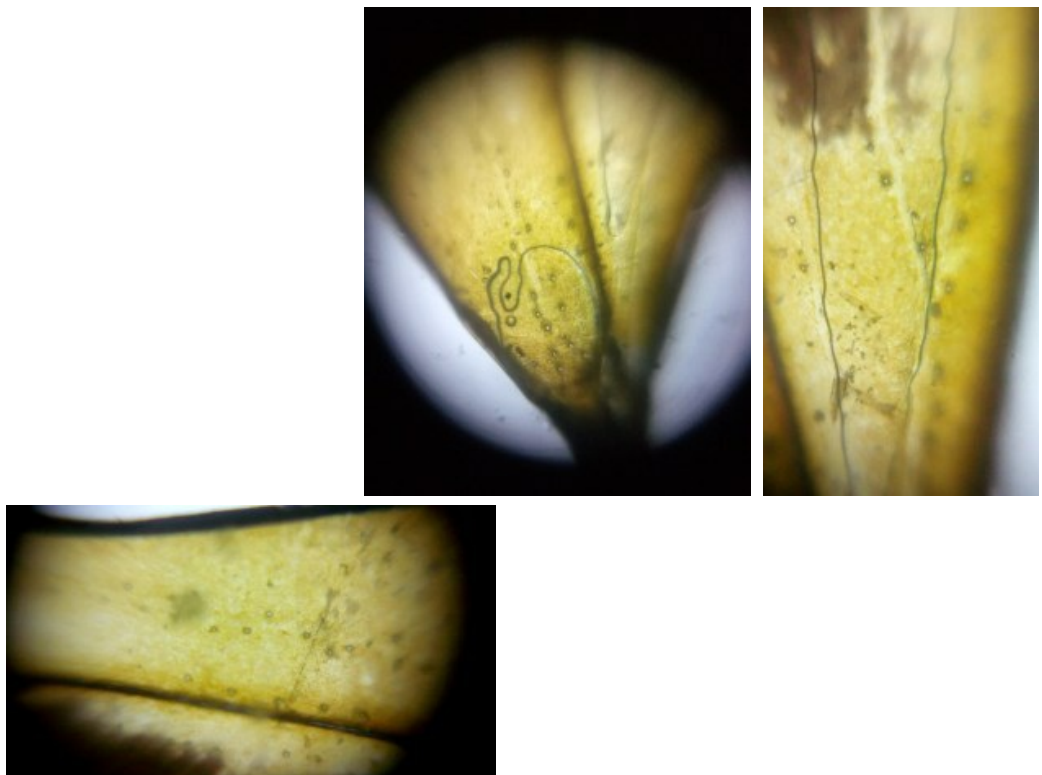


Fig. 2: Fore wing of green leaf hopper under foldscope



Fig. 3: Hind wing of green leaf hopper under foldscope

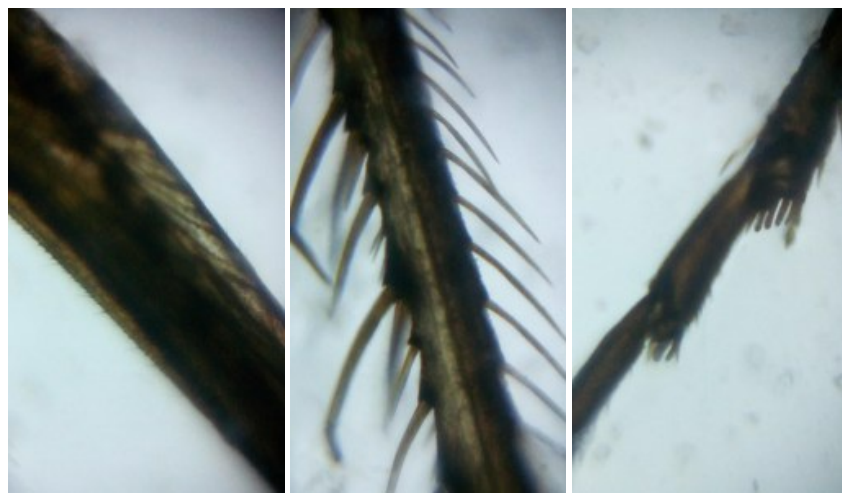


Fig. 3: Hind leg of green leaf hopper under foldscope