

# Pacific Pests, Pathogens and Weeds - Online edition

## Rice brown planthopper (064)

### Summary

- Widespread distribution. South and Southeast Asia, Oceania. Rice and wild grasses. An important pest.
- Planthoppers suck sap, reducing the number of tillers, panicles, and filled grains. Plants are stunted. Severe infestations, especially from tillering to flowering, cause 'hopperburn'; plants dry out and collapse.
- Infestations start when winged forms arrive, and lay eggs which produce nymphs and wingless adults.
- Cultural control: tolerant varieties; avoid over-lapping crops; crop rotation; remove 'volunteer' plants; split applications of nitrogen fertilizer; avoid ratoon crops; plough in stubble immediately after harvest.
- Chemical control: only use if populations high (1-2 insects per tiller). Check current recommendations as often planthoppers become resistant to insecticides.

### Common Name

Brown planthopper

### Scientific Name

*Nilaparvata lugens*

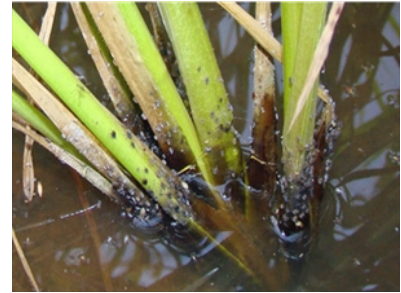


Photo 1. Large numbers of the brown planthopper, *Nilaparvata lugens*, at the base of rice plants at water level.



Photo 2. Hopperburn caused by the brown planthopper, *Nilaparvata lugens*. This occurs when large numbers of insects suck the sap from plants and cause them to wilt and die.



Photo 4. If insecticides are used, and there are no predators or parasites, populations of brown planthopper, *Nilaparvata lugens*, increase rapidly.



Photo 3. Close-up of nymphs (left) and adult (right) brown planthoppers, *Nilaparvata lugens*.

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Information from CABI (2019) *Nilaparvata lugens* (brown planthopper) Crop Protection Compendium. (<https://www.cabi.org/cpc/datasheet/36301>); and (including Photos 1,3&4) from Planthopper. Rice Knowledge Bank. IRRI. (<http://www.knowledgebank.irri.org/training/fact-sheets/pest-management/insects/item/planthopper>). Photo 2 Paul Langlois, Museum Collections: Cicadas, Planthoppers, & Allies, USDA APHIS PPQ, Bugwood.org.

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