



## Pacific Pests, Pathogens & Weeds - Mini Fact Sheet Edition

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### Rice brown planthopper (064)



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



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

### 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*

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Information from CABI *Nilaparvata lugens* (brown planthopper) Crop Protection Compendium. (<http://www.cabi.org/cpc>), and (plus 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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The mobile application is available from the Google Play Store and Apple iTunes.

