## Brown Planthopper (BPH) on Rice

**Nilaparvata lugens** Stal, local name in Khmer

### Prevention
- Prepare the nursery away from electric light
- Use resistant varieties if available
- Field should be planted at the same period
- Avoid planting during outbreaks of BPH
- Apply fertilizer in balance (avoid overdosing with nitrogen fertilizer)
- In case of an enormous presence of BPH, submerge the nursery in water and use a mosquito net to catch BPH
- Preserve beneficial insects by reducing use of pesticides and planting flowering plants along bunds.

### Monitoring
- Use fire trap to observe a population of brown planthoppers and take measures on time

### Direct Control
- Use botanical pesticide (e.g. fresh neem, lemongrass, ginger) 1 litre/15 litres of water
- Flood the field and use large net and sweep over field to collect and kill BPH

### Direct Control
- **Note:** for all pesticides usage, follow instructions on product label
- **Note:** to avoid the development of resistance to pesticides, alternate the use of pesticides in the different IRAC Group

#### Buprofezin
- Use 0.5 ml/l water
- IRAC Group 16; WHO IV (Unlikely hazardous)

#### Fenobucarb
- Use 20-30ml/8lit water; Non-systemic, contact action
- IRAC Group 1A; WHO Class II (Moderately hazardous)
- Use only when high infestation

#### Imidacloprid
- Use 0.5 ml/l water; Systemic and stomach poison; Or Dinotefuran
- IRAC Group 4A; WHO Class II (Moderately hazardous)
- Neonicotinoids; IRAC Group 4A; WHO Class II (Moderately hazardous)