## Aphids on Green Gram

*Aphis craccivora*

### Prevention
- Sowing as early as possible in the rainy season allows plants to start flowering before aphids appear
- Use a variety that is tolerant to aphids if available
- Plant natural barriers, such as maize or sorghum, around the crop at least 20 days before planting the green gram
- Practice close plant spacing as it provides a barrier to aphids coming from the field edges
- Mulch with rice/wheat straw or a clear polyethylene sheet to discourage winged aphids from landing on the crop
- Intercrop with onion or garlic
- Remove weeds and alternative hosts (leguminous plants)
- Avoid crop rotation with other host plants (e.g. groundnuts, cowpeas, pigeonpeas, chickpeas, beans, lupins, lentils, and lucerne) and avoid planting green gram for more than one season
- Avoid excess use of nitrogen which make the plants attractive to aphids
- Encourage the presence of natural enemies (ladybird beetles, parasitoids, syrphids larvae and spiders) by reducing the use of chemicals

### Monitoring
- Weekly monitoring of young plants, leaflets, stems and pods for:
  - Aphids:
    - Adults have shiny black or dark brown body with brown to yellow legs
    - Immature aphids are slightly dusted with wax
  - Signs of aphids:
    - Look for honeydew and sooty mould (or ants attracted to honeydew)
    - Young leaves become twisted due to feeding
  - Monitor every 3 days when conditions are favourable for aphids (around 24-28°C and 65% RH)
- Apply control measures when colonies are seen on 2 out of 20 plants in the field as *A. craccivora* is an important vector of more than 30 plant viruses

### Direct Control
- Use overhead irrigation to remove aphids from the leaves
- Use natural enemies if available in your country (e.g. *Aphidius spp.*, *Trioxys indicus* or *Chrysoperla spp.*); follow directions for their spread or release
- After harvest, destroy crop residues immediately to reduce aphid movement
- Use yellow sticky traps to control the winged aphids coming from the edges of the field and older crops
- Spray in the early morning or evening with 160-200 cc neem oil and 100g of liquid soap in 20L of water

Note: Pesticides may be available to control this pest. Please check with the Ministry of Agriculture in your country to find out which pesticides are registered in your country and the local restrictions for their use.