**Whiteflies in tobacco**  
*Bemisia tabaci*

### Prevention
- Avoid, if possible, planting tomatoes and cassava nearby because they host whiteflies.
- Remove weeds because many weeds, such as geranium, are whitefly hosts.
- Intercrop with maize or cowpeas because they repel whiteflies.
- Remove and bury all residues from the field after harvest. However, if there were no major insect pests or diseases in your crop, then leave residues to improve the soil, and reduce water loss.

### Monitoring
- Whiteflies are tiny flies that fly off when shaking a plant.
- Regularly check field borders for whiteflies; as these areas are infested first.
- Be alert for rapid population build up in tobacco when nearby tomato or cassava is harvested.
- During these critical periods, check the field twice weekly.
- Check for whitefly adults on the undersides of leaves.
- If 3 or more are found per plant consider the plant as infested. If 10 to 20 per young plant are found on average, consider action.

### Direct Control
- Spray with soap once per week for at least 3 weeks, reaching coverage undersides of leaves. Mix 5 litres of water with 3 tablespoon of liquid soap.
- Grind neem seeds or chop Hibiscus leaves, or Tephrosia vogelii (Uubba) leaves, then soak in water for 1 day, add a bit of soap, then spray in the mornings reaching also undersides of leaves (kills only young stages of whiteflies).

### Direct Control
- Usually no chemical intervention is needed. Spray only at heavy infestations. Spray early mornings and late evenings, when whiteflies are less active.
- When using a pesticide, even a botanical, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, pre-harvest interval, max. number of sprays, restricted re-entry interval.
- WHO toxicity class II pesticides might not be allowed in local IPM schemes.

### Restrictions
- Always consult recent list of registered pesticides (ZEMA).
- Abamectin-based products (AbamillPlus, Dimectin, Biominectin, Hypermectin, Mecti, and others). Chloride channel activator group of avermectin pesticides.
- Spray malathion-based products (Bluecross, GammaTox, HukuDust, and others. Organophosphate group;
- Spray imidacloprid – based products (AmigoPT, Ngwenya T450FS, others) (usually at 0.4 to 15 ml/litre depending on the product, but check label). Neonicotinoid group of pesticide.
- Alternatively spray deltamethrin -based products (PALI 250WP; DECIS FORTE, KESHET 2.5EC; and others) (usually at 10 ml per litre water, but check label). Pyrethroid pesticide.
- Not classified by WHO, but considered to be potentially slightly acute hazardous; pre-harvest interval (p.h.i.) 2 weeks; restricted re-entry interval (r.e.i.) 1 d, min retreatment 7 d, max 3 sprays. Toxic to bees, and aquatic organisms.
- WHO toxicity class III (slightly acute hazardous); p.h.i. 3 weeks, r.e.i. 3 d, min retreatment 14 d, max 2 sprays
-WHO class II (moderately acute hazardous); p.h.i. 1 month, r.e.i. 1 d, max 2 sprays /season at min 14d interval. Highly toxic to bees: do not spray on flowering tobacco, not when weeds are flowering and not near bee hives.
- WHO class II (moderately acute hazardous), p.h.i. 1 month, r.e.i. 1/2 day. Max. 2 sprays with retreatment interval of 14 days. Pyrethroid pesticides do not work well above 25°C.