

Regulated pests commonly intercepted with imported cut flowers



Original thinking... applied

Whiteflies

In particular, *Bemisia tabaci*



Quarantine Listed Whiteflies

- ***Bemisia tabaci*** – tobacco whitefly
Cosmopolitan; polyphagous
- ***Aleurocanthus spiniferus*** – orange spiny blackfly
Italy, Croatia, Montenegro, Asia, Africa, Hawaii; polyphagous, *Citrus*
- ***Aleurocanthus woglumi*** – citrus blackfly
Pantropical; polyphagous, *Citrus*



Bemisia tabaci



Aleurocanthus sp.



Bemisia tabaci

Whitefly detection – Plant Damage

Symptoms caused by whitefly are very similar to other sap-feeding insects, such as aphids, psyllids and scale insects

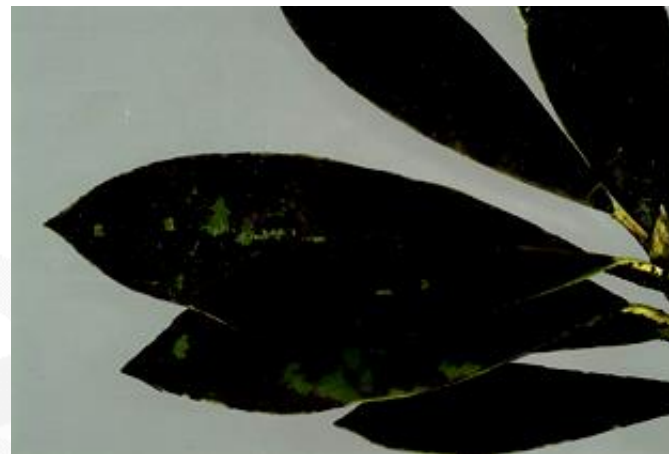
White colonies are frequently attended by ants which feed on egested honeydew



Chlorosis on upper surface of leaf



Distortion



Black mould growing on honey dew



Waxy deposits

Whitefly detection – Pupae



Heavy infestation, all immature stages present



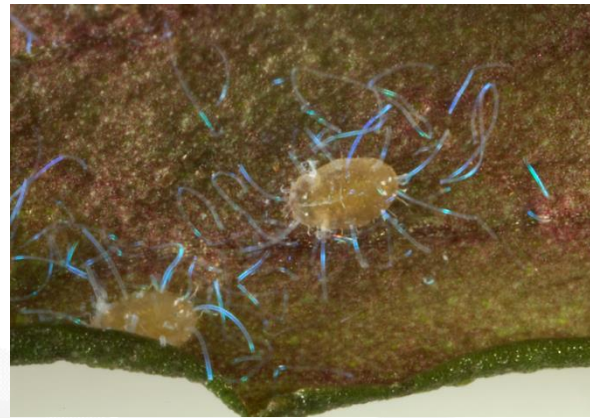
Waxy pupa



Spiky pupa



Black pupa



Iridescent blue wax



Patterned pupa

Bemisia tabaci – Tobacco whitefly

- REGULATED
- Species Complex (36+ spp.)
- Major non-indigenous plant pest
- Vector of 111+ plant viruses
- Polyphagous (800+ plant spp.)
- Cosmopolitan
- Commonly transported in trade
- Between a quarter and a half of all Fera identifications are *Bemisia tabaci*



Bemisia tabaci cf. *Trialeurodes vaporariorum*

Eggs – key characters

Oviposition Pattern

Colour of mature eggs

Do they remain erect
or collapse after
hatching



Bemisia tabaci



Trialeurodes vaporariorum

Bemisia tabaci cf. *Trialeurodes vaporariorum*

Pupa (Puparium) – key characters

Colour

Shape

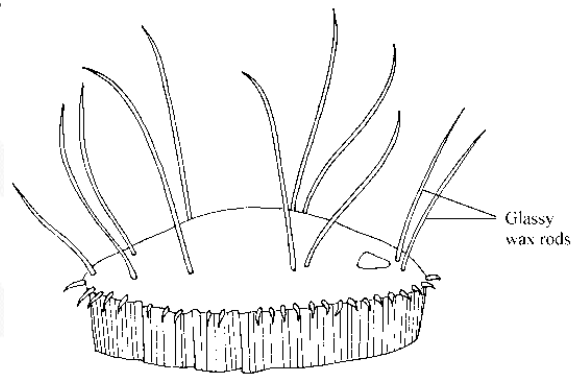
Presence of pallisade wall

Dorsal wax rods

Marginal papillae



Trialeurodes vaporariorum



Bemisia tabaci



Trialeurodes vaporariorum

Mixed populations containing both species are fairly common!

Bemisia tabaci cf. *Trialeurodes vaporariorum*

Adults – key characters

Size

Colour

Wing position

Flight



Identification of adults in the field is not reliable!