




Virus diseases on cucurbits

CMV, CGMMV, PRSV, TRSV, ToRSV and ZYMV Sudu massa; Venn ee, Sinhala: kudiththa; Tamil – Azhukkanavan, Pathra keedawa; ilai thathikal, Palamakka; pani poochi

| | Prevention | Monitoring | Direct Control | Direct Control | Restrictions |
|---|---|--|--|--|---|
|  <p>Whitefly (David Riley, University of Georgia, Bugwood.org)</p> | <ul style="list-style-type: none"> Viruses are transmitted by vecotors such as whitefly <i>Bemisia tabaci</i>, aphids <i>Myzus persicae</i> and <i>Aphis gossypii</i>, leaf hoppers <i>Amrasca</i> sp., thrips <i>Thrips palmi</i> and <i>Scirtothrips dorsalis</i> Destruct residues of previous crop Remove alternate hosts Use healthy planting materials If transplanted, manage the seedlings in a protected nursery Use recommended fertilizers Use barriers (net tubes/vegetation) to prevent entrance of vectors Practise mulching Treat the seeds (refer yellow direct control) | <ul style="list-style-type: none"> Use yellow sticky traps (1/100m²) to monitor whiteflies, aphids etc Observe for leaf curling, yellowing mosaics or yellowing veins, stunting, rosetting, oil spots on fruits and deformed fruits | <ul style="list-style-type: none"> Remove and destroy virus infected plants Spray neem seed kernel extract – NSKE (30-40g seeds)/1 lit) once in 7 days to control vectors | <ul style="list-style-type: none"> Apply recommended insecticides once or twice paying attention to the recommended pre harvest intervals Read the label recommendations and pre harvest intervals before use Avoid use of insecticides with same mode of action more than twice per season For seed treatment – Thiamethoxam 70%WG. Application rate – 3.5g /1kg of seeds. Soak seeds in an aqueous mixture 24 hours before planting Thiocyclam 50% SP. Dilution rate - 40g/16L of water. Application rate - 800 – 1000 g/ha For the control of eggs and nymphs of whitefly - Buprofezin 25% SC (45 ml/16L). ml-1260 ml/ha). Buprofezin 40% SC (24 ml/ 16L) (315-675 ml/ha) Chlorantraniliprole 20% + Thiamethoxam 20% WG (100 – 120g/ha) Pymetrozine 50% WG (8g /16L) Sulfoxaflor 50% WG (5g/16L) | <ul style="list-style-type: none"> WHO class II. IRAC MOA 4A WHO class II. IRAC MOA 14 WHO class III. IRAC MOA 16 WHO Class II. IRAC MOA (28+4A) WHO class III. IRAC MOA 9B WHO Class II. IRAC MOA 4C |
|  <p>Individual cucurbit vines covered with nets- Photo by J marasinghe</p> | | | | | |
|  <p>Aphids – Photo by J. Marasinghe</p> | | | | | |

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CREATED/UPDATED: October 2019/October 2020

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