

EFFECT OF COMMON VEGETABLE PLANTS ON THRIPS ABUNDANCE AND TOMATO CHLOROTIC SPOT VIRUS (TCSV) INCIDENCE IN TOMATO FIELD

Background:

- TCSV is a new tospovirus in tomatoes, transmitted by thrips
- Mostly all vegetable crops cultivated in Miami-Dade county are the host of thrips
- Vegetable plants need to check for TCSV and TCSV vector thrips



Western flower thrips



Common blossom thrips



Melon thrips



Larva of thrips



Chilli thrips



Florida flower thrips



Onion thrips

Thrips species in vegetable crops in Miami-Dade county



Experimental plot with tomato and vegetable crop

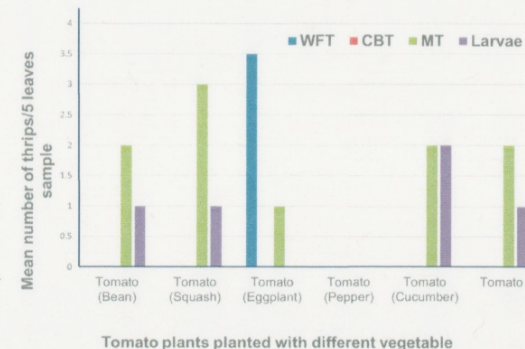
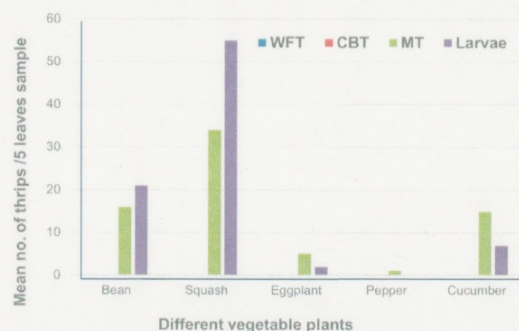
Present Field Study at TREC

- Tomato variety - Sanibel
- Vegetables- okra, squash, eggplant, cucumber, pepper, bean
- Planting date - 12/20/2017
- Evaluation of treatments- Incidence of TCSV and thrips; and marketable yield per treatment

Experimental design	Plot size	Buffer	Treatments	Sample size	Sampling Method
Randomized Complete Block design	15'L x 3' W	10' L	1. Tomato with okra 2. Tomato with squash 3. Tomato with eggplant 4. Tomato with cucumber 5. Tomato with pepper 6. Tomato with bean 7. Tomato only	5 Leaves & 10 flowers for tomatoes 5 leaves of all vegetables	Wash leaves with 70% ethanol to dislodge thrips

Results:

- TCSV and thrips pressure is low in tomatoes
- In all samples, Melon thrips are common



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