

Out And About In Southwestern Ontario

All Crops:

- **Cabbage loopers** have made significant increases in the past few weeks. More damage to leaves and now fruit damage are showing up in most crops. Overall the control up until now has been quite good; but the pressure from outside has gone up. You will probably notice overlapping generations and more damage along walls and entranceways where the moth pressure is high.



Cabbage Looper Of Various Sizes



Looper Damage To Cucumber Fruit

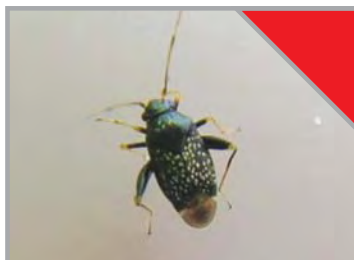


Encarsia And Whitefly Pupae On Tomato

- Overall this has been a below-average year for **whiteflies**; but now the pressure from outside has increased. Talk with your MGS Pest Management Rep. to decide what the best course of action is for your farm.
- Some **occasional pests** that you may be seeing: grasshoppers, earwigs, flea beetles (ex. Garden flea hopper) and leafminers have been spotted in low numbers.



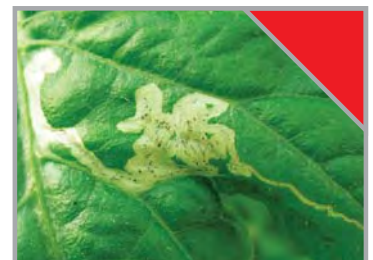
Earwig Damage To Cucumbers



Garden Fleahopper Adult



Grasshopper And Damage



Leafminer

Tomatoes:

- **Potato aphids** have been constant for a couple of months. Natural *Aphidoletes* and various parasites are in good numbers and have kept many spots in check without intervention.
- **Thrips** have been a constant pest in some tomatoes. So far the population has been kept in check by the removal of lower leaves and immediately taking them out of the greenhouse. Some hotspots are being taken care of by removing additional leaves.



Aphidoletes In Tomato



Another Way
We Are
Helping You Grow

- **Russet mites** have been seen in the past few weeks. There are no registered pesticides for russet mites in Ontario.
- **Spider mites** are increasing. You may be noticing many, small colonies under the vents, along walkways and along walls. There are several miticides registered for use in tomatoes. The use of a **spreader sticker** is very important for good coverage into the webbing and reducing beading onto the leaf surface. Speak with your MGS Pest Management Team Rep. for further information.
- There have been several bouts with **powdery mildew** already this year. Fluctuating temperatures and humidity is creating good conditions for mildew. The full registration of Pristine for tomatoes has helped with heavier infections and some spot treating in problem areas.



Tomato Russet Mite Damage



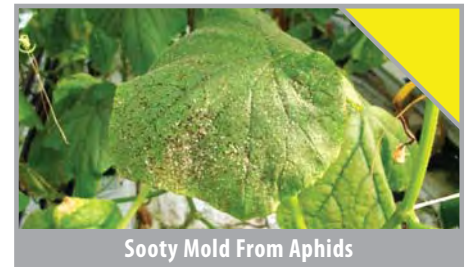
Intercropping In Tomatoes

- **Intercropping** has brought about its own challenges for spray coverage for mites, loopers, whiteflies and mildew. Thorough coverage may require additional water and slower spraying in the extra foliage. A preventative spray for mildew on new plants has really helped with control. Continue to check the old plants for spider mites, russet mites, thrips etc. that may move onto new plants. Whitefly adults will tend to move onto the new plants quickly. Parasite populations will be coming from the old crop for weeks to come. This will be a major source of beneficial insects if you have kept up introductions of parasites and have 70-80% parasitism.

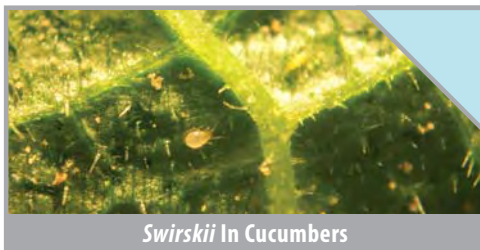
Cucumbers:

- **Spider mites** are well on their way to high levels. Fortunately, *Persimilis* is also within its optimum temperature. High influxes of mites may still require a spray of a compatible miticide like Vendex. Spreader sticker at high rates can be harmful to some beneficials, so talk to your MGS Pest Management Rep to see what rate will work for your farm.

- **Melon aphids** are still coming in steady numbers. Intercept has been working well. Note that sooty mould will grow easily when the humidity is high. Melon aphids are also very prolific in hot conditions and hotspots may be heavy before they are detected. Due to low tolerance for aphid-borne viruses, the natural *Aphidoletes* and parasites are not very much help this year: pesticide applications are warranted immediately.



Sooty Mold From Aphids



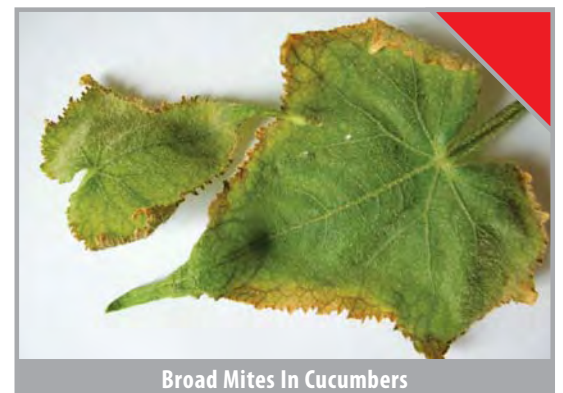
Swirskii In Cucumbers

- **Thrips** are nicely under control with the introductions of adequate *Swirskii* early in the crop cycle. The best strategy is a multi-pronged approach of cleanup, sticky tape and traps, and adequate beneficials. *Swirskii* is continuing to build and do well with a good supply of thrips. Overall the control is very good.



Sticky Tape For Thrips Control In Cucumbers

- **Broad mites** have not been detected yet. With the increased heat the past few weeks, this may still be a pest to come.



Broad Mites In Cucumbers

Peppers:

- **Leafhoppers** have been spotted in low numbers at many farms. So far no damage has been seen. Leafhopper nymphs look a lot like thrips but run *sideways* when disturbed.
- We are still on the lookout for **cyclamen or broad mites** in peppers this year. Populations of *Degenerans* have been very high and this may be helping to keep low populations under control if they are present.



Leafhopper Nymph



Cyclamen Mite On Pepper Foliage



Cyclamen Mite On Pepper Fruit

- **Spider mites** are on the rise; see all crops above. Continue to add *Persimilis* as needed to keep populations in check.
- **European corn borer** has been starting to increase. Note that some farms are finding some internal pressure from the bottom of the plant in fruit on unwanted low growing side shoots.



Fruit At The Base Of The Plant



Corn Borer Inside Pepper Fruit



Infected Fruit On Floor Is A Source Of Inoculum

- ***Fusarium sp.*** is ramping up. Continuous removal of infected plants and fruit helps keep inoculum to a minimum and, in turn, reduces fungi overwintering into next year.

Pollination Update:

- **Bee activity** has been good despite some extreme temperatures. There has been a very small portion of flowers aborting after pollination this season.



Melittobia Wasp

- **Culling** old hives for space and to prevent *Melittobia* wasps has been an ongoing project. They will lay eggs into the developing larvae and cause an eventual decline in the number of workers.
- Providing the hives with some **shade** from the intense sun will help the hive during hot days.
- If you are **installing your own hives** it is very important to put the newest hives on the bottom of the stack.

- **Pepper growers** who want to consider bees for the fall should speak with their MGS Pest Management Rep. to determine what your needs are and when to install them for maximum effectiveness.



Bee Hive With Shade And Cleared Doorway