



MUCK CROPS RESEARCH STATION IPM 2011

This is the Muck Crops Research Station Report and IPM Information for Tuesday June 28, 2011

Carrot weevil activity has slowed. If you have already sprayed once for carrot weevil, that may be all that is necessary. If the counts are above 5 weevils/trap the second Imidan spray is recommended 10-14 days after the first spray. Imidan and Matador/Warrior are registered for the control of carrot weevils. Follow the labels carefully. To avoid any risk of burning your carrots, do not spray Lorox or any other herbicide within 3 days after spraying Imidan.

With the rainfall we received the last few days, several weeds started to grow in many fields. Goal is registered for control of broadleaf weeds after onions have 2 fully developed leaves. The onions should be exposed to one or two sunny days before application to build up wax layer. Chateau WDG herbicide provides preemergence control of several broadleaf weeds common in onion fields. It may be applied on onions between the 3 and 6 leaf stages. Follow the labels carefully.

For post emergence weed control in carrots, use Lorox once the carrots are in the 2nd true leaf stage, and 8 to 15 cm tall. Note that emerging carrots are very sensitive to Lorox and severe injury may occur if there is heavy rain, or if the area is irrigated. Do not use Gesagard near the time of crop emergence or once the crop has emerged.

Purple blotch and stemphylium leaf blight have been observed in transplanted onion fields. Infection occurs when warm temperatures (18-30°C) coincide with prolonged dews or leaf wetness. Weaker plants or those affected by insects, other diseases or physiological disorders such as herbicide damage, heat and pelting rain damage are at highest risk. Application of fungicides such as Mancozeb (e.g. Manzate) should work well at this time, which will also act as protectant fungicide for other diseases.

The Pest Management Regulatory Agency (PMRA) recently announced the registration of Inspire™ (difenoconazole) fungicide for control or suppression of purple blotch on bulb vegetables including onions. Consult the full product label for detailed instructions, precautions and restrictions.

BOTCAST has a cumulative disease severity index (CDSI) of 23. Risk of developing botrytis on onions at this time is moderate. First spray threshold is when CDSI is 30 or more.

DOWNCAST predicted sporulation infection period in the last 4 days. However, taking into account the crop canopy size and the weather forecast, risk of downy mildew on transplanted onions is moderate and low to moderate in seeded onions. No symptoms have been reported around the marsh.

The carrot rust fly activity around the marsh is very low as the first generation emergence is complete. No carrot rust fly was caught on sticky traps at our station. Thresholds are 0.1 flies/trap/day for fresh market and 0.2 for processing carrots.

The onion fly activity around the marsh is generally low and will remain low for the coming few days as we have passed the first generation peak. Onion maggot fly count at our station decreased to 0.2 flies/trap/day.

A few thrips have been seen on onions around the marsh. Thrips count at our station was 0.01 thrips/leaf. The threshold for insecticide application is 1 thrips/leaf.

Celery requires several micronutrients. Application of Boron is recommended. Use caution when applying boron because it builds to toxic levels quite quickly, harming rotational crops. Start applying magnesium in the form Epsom salt or other forms every 10-14 days when the plants are one third grown. Calcium is very important when





growing conditions are dry.

Bacterial leaf spot has been confirmed in celery fields. Carefully monitor your fields and if your field is infected with bacterial leaf spot, stay out of the field when it is wet.

Tarnished plant bugs (TPB) have been spotted in the marsh. Thus far we have not observed damage from TPB in celery or lettuce fields. Spray thresholds are 0.1 and 0.2 TPB/plant for fresh market and processing celery respectively and/or 6% plants showing damage. Good weed control is an important management tool for reduction in TPB populations.

Aster leafhoppers have been caught in all areas of the marsh, but the numbers on sticky trap counts remain low. We have reached the degree day threshold for local adults' emergence. No symptoms of aster yellows have been reported on the marsh.

In lettuce, few incidences of sclerotinia drop and grey mould have been seen in the marsh. Cool and wet weather contributes to the development of lettuce (sclerotinia) drop. Botrytis grey mould occurs in damp weather with temperatures of 18°C–23°C. Control recommendations are listed in OMAFRA's pub 363 p.130 (2010-11 version).

BREMCAST predicted a sporulation infection period in the last 4 days. Risk of downy mildew incidence on lettuce is moderate to high. Be aware that the pathogen (*Bremia lactucae*) that causes downy mildew on lettuce is different from the pathogen (*Peronospora destructor*) that causes downy mildew on onions.

On June 27 at the Research Station the soil temperature at 5 and 10 cm depth was 19.0 and 18.3°C respectively. A total of 7.3 mm of rain accumulated at the station between June 24 and 27.

ANY QUESTIONS OR COMMENTS? Call Michael Tesfaendrias or Mary Ruth McDonald at 905-775-3783

