



MUCK CROPS RESEARCH STATION IPM 2010

This is the Muck Crops Research Station Report and IPM Information for Friday July 2, 2010

The weather forecast for the next 5 days is relatively warm. Therefore the risk of leaf disease symptoms appearing in your crops is low to moderate.

To date, we have received 77 mm rain in May and 230.8 mm rain in June. The total amount of rain was average for May and above the long term (10 year) average for June. The long term averages were: May 78.3 mm and June 79.7 mm. The air temperatures were above the long term (10 year) average for May (15.4°C) and average for June (18.4°C). The long term (10 year) averages were May 12.3°C and June 18.2°C.

DOWNCAST predicted no sporulation infection period for the last 3 days. Risk of downy mildew on transplanted onions is low to moderate and low on seeded onions. If it rains and/or leaf wetness is prolonged risk of downy mildew will increase particularly in transplanted onions as the crop canopies are getting larger.

BOTCAST has a cumulative disease severity index (CDSI) of 16, which is still low for fungicide spray. Risk of developing botrytis on onions at this time is low. We found botrytis leaf blight on onion at our station but the count was very low. Check your fields regularly for botrytis lesions, which is about 1-3 mm in diameter greyish white leaf spots surrounded by a silvery white halo.

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 2 leaf stage, 8 to 15 cm tall. Lorox appears to work best if applied when sunny and when a few sunny days are expected post application. 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.

Onion fly counts are generally low. We have observed onion maggot damages in onions mainly in transplanted onions. To reduce onion maggot problems, all volunteer onions and any remaining cull piles should be removed.

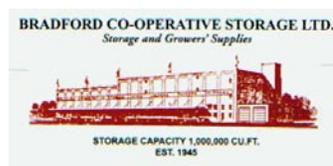
Thrips count at our station was 0.17 thrips per leaf, which is below the spray threshold. With warm weather population of thrips may increase. Thus, monitor your fields for thrips regularly. The threshold for insecticide application is 1 thrips per leaf.

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. If fields are beyond the 6th leaf stage or above the 2nd threshold, which is above 5 weevils/trap, monitoring for the pest is no longer needed.

Continue to apply manganese sulfate at a rate of 1.5 to 2.75 Kg/ha in 300 L of water repeated in 4 to 5 sprays 10 days apart. Use the low rate on small plants and increase the rate as the season progresses.

Carrot rust fly counts are very low. No carrot rust fly was caught on sticky traps at our research station. Thresholds are 0.1 flies/trap/day for fresh market and 0.2 for processing carrots.

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

We have seen tarnished plant bug damages in celery and lettuce. Besides pesticide control, good weed control is an important management tool for reducing TPB populations. TPB weed hosts include redroot pigweed, chickweed, dandelion and mint. Thresholds are 0.1 and 0.2 TPB per plant for fresh and processing celery and/or 6% of the plants showing damage.

Aster leafhopper counts are very low right now, so no sprays are recommended.

Incidences of Sclerotinia drop and grey mould on lettuce fields have been seen. Rain may help to increase the incidence of Sclerotinia drop. To protect lettuce from Sclerotinia, once it is transplanted or thinned, spray Ronilan at 1.1 kg/ha or Botran at 2.3 kg/ha. Botrytis grey mould occurs in damp weather with temperatures of 18°C–23°C. Rovral can be applied at 1.5 kg/ha to control Botrytis. Good coverage of the bottom leaves is essential for good disease control.

BREMCAST predicted no sporulation infection period in the last 3 days. Risk of downy mildew incidence on lettuce is low to moderate. We found downy mildew in our lettuce trial plots at our research station. 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.

The soil temperature at the Research Station at 5 and 10 cm depth is currently 16.9 and 16.4°C. No rain fell June 29 and July 1.

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

