



## MUCK CROPS RESEARCH STATION IPM 2009

### **This is the Muck Crops Research Station Report and IPM Information for Tuesday May 26, 2009**

The barley windbreaks were growing rapidly this past week and should be sprayed when they are 10 to 15 cm (4 - 6 inches) in height. Both Poast Ultra and Select are registered for this use in onions. The rate for Poast in onions is 0.32 - 1.1L/ha with the surfactant Merge at 1 - 2.0L/ha. Select can be applied at 0.38 L/ha. Be certain to maintain good coverage. Use flat fan nozzles for good coverage.

For May 21 at the Research Station the soil temperature at 5 and 20 cm depth was 12.9 and 11.8°C. A total of 2.5 mm rain accumulated between May 22 and May 25.

Carrot weevil adults are moving into some carrot fields. Control of carrot weevils is not necessary until carrots reach the 2<sup>nd</sup> true leaf stage and only if the population warrants treatment. The cumulative count at our station is 3.9 weevils per trap. The cumulative carrot weevil count at our other research site on Woodchoppers Lane and Jane street is 1 weevil/trap. The threshold for spray is a cumulative weevil count of 1.5 weevils/trap. Imidan is registered for carrot weevil control.

Onion fly activity has picked up. Onion fly count at our station increased to 0.8 flies/trap/day and at our other site on Woodchoppers and Jane the count was 1 fly/trap/day. To reduce onion maggot problems, all volunteer onions and any remaining cull piles should be removed.

Carrot Rust Fly is at 350 DD therefore adults are beginning to emerge. Carrot rust flies have been found on orange sticky traps at our station. Thresholds for fresh market carrots are 0.1 flies/trap/day and for processing are 0.2.

Tarnished plant bug DD threshold for emergence have reached and we can expect to begin seeing them in celery and lettuce fields.

Aster leafhopper DD is at 108 and overwintering eggs start to hatch at 128 DD and adults emerge at 390, so emergence of adult aster leaf hoppers is not expected for at least 3-4 weeks. Besides our local aster leafhopper population we expect aster leafhoppers to migrate on the warm southerly winds from the United States. These leafhoppers often arrive before our local population emerges.

Onion Herbicides recommendations can be found in Publication 75 the "Ontario Guide to Weed Control" on pages 230-232. On muck soils, apply Prowl 400 at the loop stage and again at the 2<sup>nd</sup> true leaf stage. Prowl works best if rain or irrigation is received within seven days of application. Prowl controls weeds as they emerge but do not control any existing weeds.

Frontier will help suppress yellow nutsedge before the yellow nutsedge has emerged, apply only once per season at the loop stage.

A complete list of herbicides for pre and post-emergence weed control in carrots is listed on 219-221 in pub. 75. Do not use Gesagard near the time of crop emergence or once the crop has emerged. 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.

In carrots Ridomil 1G is registered for damping off and cavity spot control. Apply the granular formulation in the seed furrow at a rate of 25Kg/ha or 215 g/100m of row. This material will not help control forking of



carrots even though *Pythium* is believed to be one of the main causes of forking.

Ranman 400SC is registered for the suppression of cavity spot. A maximum of one application per season is allowed, either as post-plant, pre-emergent application within 3 days after planting or as a soil-directed spray 14 days after planting.

Celery transplant health is obviously very important, be sure to control fungus gnats in your greenhouse during transplant production. Before transplanting celery, check all the transplants for the small, dark brown spots that are the first signs of Septoria late blight. Don't use any transplants that are infected with late blight. Also check your transplants for possibly pea leaf minor damage before transplanting. Damage symptoms appear as stippling and mining on the leaves.

In lettuce, Ridomil Gold 1G is registered for the control of *Pythium* stunt and damping-off at a rate of 25 kg/ha (10 kg/acre). Apply with seed in-furrow. Use 115 g per 100 m of row. Do not use on transplants.

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