

This is the Muck Station Report and IPM Information for Thursday May 15, 2008.

It is a relatively windy day today which necessitates the good grower practice of using barley for wind protection in carrots and onions. Forecast for tomorrow is warmer, 19°C. The rest of the weekend looks cooler with 70% chance of rain for Saturday and Monday. Since Monday 1.3 mm of rain was accumulated, however, there is enough moisture for seed germination but be sure to work up your land just before seeding to maintain the current soil moisture levels as long as possible.

Degree Days started to accumulate as the weather warms up and will accumulate much faster in the next four days. Onion Maggot degree days are presently at 235, the time where first generation flies starts emerging in higher numbers. Onion maggot fly counts on station are 2.1 flies/trap/day and at our other research site on Woodchoppers lane they are 1.6 flies/trap/day. Thresholds apply to the second generation of flies; control for first generation is at seeding. To reduce onion maggot problems, all volunteer onions and any remaining cull piles should be removed. In seeded onions, the granular insecticide is the best protection.

Carrot Weevil DD is presently at 136 and adults will begin to lay eggs at 138-156 DD. No weevil has been found in carrot weevil traps at both sites of the Muck Crops Research Station. However, carrot weevil adults are moving into some carrot fields. Weevils overwinter in plant debris particularly in sheltered grassy areas such as ditches and around barns. Thus, weed control around field edges may reduce overwintering populations. The threshold for weevils is a cumulative count of 1.5 weevils/trap. Imidan is registered for the control of carrot weevils. For cumulative counts between 1.5 and 5 weevils/trap, one treatment is recommended at the 2nd leaf stage. For counts above 5 weevils/trap an additional treatment is recommended at the 4th leaf stage.

Carrot Rust Fly is at 245.2 DD and overwintering adults begin emerging at 329 DD. Tarnished plant bug DD is at 28.5. Aster leafhopper DD is at 73.4 and overwintering egg hatch begins to occur at 128 DD. 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.

The 2008-2009 versions of the pub 363 Vegetable Production Recommendations and pub 75 Guide to Weed Control are available from OMAFRA. All page numbers listed in the Agriphone are for these editions of the guides.

Barley can be used to reduce wind erosion in onions and carrots. In onions, broadcast barley at a rate of 50 to 55 lbs/acre. In carrots use 45-50 lbs/acre. Seed the barley the same day you seed the crop. Treated barley seed is not necessary since barley smut is different from onion smut.

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 2nd 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.

Prowl can be applied to onion transplants once they are established, usually a good 10 days after transplant once the roots have begun to spread. Goal can also be applied once the transplants are established. The onions should be exposed to one or better yet two sunny days before application.

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.

Celery transplant health is obviously very important, be sure to control fungus gnats in your greenhouse during transplant production, the larvae will damage the roots in the plug and if conditions are wet and cool in the field the larvae in those plugs will continue to damage the roots. Also check your transplants for possibly pea leaf minor damage before transplanting. Damage symptoms appear as stippling and mining on the leaves.

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.