

This is the Muck Station Report and IPM Information for Monday May 26, 2008.

The weather starts to warm up and according to the long-range forecast, there is no risk of frost over the next few days. No rain was accumulated at the research station from May 23 to May 25.

Disease forecasters BOTCAST for onion botrytis, DOWNCAST for downy mildew of onion and BREMCAST for downy mildew of lettuce have been placed at the Muck station. Disease forecasts will be available over the next several weeks. Currently botrytis blight and downy mildew of onions are not a problem.

Onion maggot degree days are presently at 300, the time where first generation flies starts emerging in higher numbers. Onion maggot fly counts on station are 2.6 flies/trap/day. At our other research site on Woodchoppers lane their number increased and is at 3.8 flies/trap/day. Thresholds apply to the second generation of flies; control for first generation is at seeding.

When barely windbreaks are at 10-15 cm (4-6 inches) high, it is time to treat them with selective herbicides. Poast ultra plus at 0.32 to 1.1 L/ha with the surfactant Merge can be used in onions. Use the lower rate when temperatures are warm and barely is actively growing. Be certain to get good coverage.

Carrot Weevil DD is presently at 169 and we have reached the degree day threshold where adults start to lay eggs, which is basically now. The cumulative weevil count at the station is 0.16/trap. At our other research site on Woodchoppers Lane the cumulative weevil count is at is 2.03 weevils/trap and reached threshold necessitates for spray at 2 leaf stage.

Often weevil counts reach threshold before carrots are seeded or the seedlings have emerged. Those counts will be indicative of the amount of damage that will be seen at harvest. The higher the number of adults that emerge the more eggs that will be laid obviously increasing potential damage by the larvae. Therefore weevil traps are put out in carrot fields before the fields are even seeded.

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.

Celery is also a host crop for weevils. Weevil damage in celery can be avoided by transplanting well after weevil egg hatch. If the eggs hatch and there is no food then the larvae should die.

Carrot Rust Fly is at 350 DD therefore overwintering adults are beginning to emerge. No carrot rust flies have been seen at our station. Thresholds for fresh carrots are 0.1 flies/trap/day and for processing are 0.2.

Tarnished plant bug DD are still at 33.7 and as the weather starts to warm up the DD will be accumulated fast resulting in the emergence of tarnished plant bug. According to the long range temperature forecast, we can expect to begin seeing them around next week in celery and lettuce fields.

Aster leafhopper DD is at 103 which at current temperatures will be in about 8-10 days. 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 carrots. Broadcast barley at a rate of 45-50 lbs/acre. Seed the barley the same day you seed the crop.

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. 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.

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.

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.

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.