This is the Muck Station Report and IPM Information for Thursday May 29, 2008.

Today the weather is relatively warmer compared to the last two days. It will be warmer for the next two days with possibility of 70% chance of showers for Saturday and Sunday. Only 0.8 rain was accumulated between may 26 and 28.

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.

Onion Maggot degree days are presently at 327 so we are well on our way into the first generation peak. Using historical data and the weather forecast, we expect to reach first generation peak around mid-June. The bulk of the damage from the maggots should be noticeable 7 to 14 days after peak. Onion maggot fly counts on station have decreased to 2 flies/trap/day and at our other research site on Woodchoppers lane they have decreased to 2.9 flies/trap/day. Thresholds apply to the second generation of flies, control for first generation is at seeding.

Carrot Weevil DD is presently at 188 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 2.1/trap. At our other research site on Woodchoppers Lane the cumulative weevil count is 2.4 weevils/trap. Both counts are above threshold.

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 380 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 threshold for emergence have reached and we can expect to begin seeing them in celery and lettuce fields.

Aster leafhopper DD are at 116, overwintering egg hatch is occurring and there should be some adults that have immigrated on the warm southerly winds from the US. On station we use orange sticky traps to scout for aster leafhoppers. We have not caught any aster leafhoppers on station yet.

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.

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.

Many of the onion fields in the Holland Marsh are in the first true leaf stage and in a few fields the second true leaf is emerging.

Keep an eye on the barley wind breaks and spray 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 control of weeds 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. Goal is registered for control of broadleaf weeds after the onions have two fully developed leaves. 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 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.