

**Vermont Vegetable and Berry News June 25, 2008**

Timing is very important. I looked at a field where the grower had sprayed too early and it did not control the ECB. You have to wait till the tassel is open but still pointing vertical. When the tassels are horizontal, it is too late. Put your first spray on when you see around 30 to 40% of the field in early tassel. Wait 4 to 5 days for the rest of the field to come into tassel and make your second application. This will do a good job controlling the ECB larvae. It is the only time to get the job done. Otherwise, the larvae will bore into the stem and be impossible to control. Remember, spike tassel is too early and full tassel is too late. You need to time it just right. When the tassels are still vertical but separated from each other, that is perfect. So look at your fields and keep track of when they are coming into tassel. Morning, before dawn is the best time to make an application as the ECB will be out and you are avoiding honey bees.

There are many materials labeled for ECB in corn, and these are listed in the New

Organic growers can use pyrethrin (Pyganic) and/or neem (AzaDirect). When there are high populations, insecticides may need to be re-applied every 3 to 4 days and even that may only provide partial control.

## **SLUGS IN STRAWBERRIES**

(adapted from David Handley's UMaine IPM report)

Slugs usually feed at night, leaving large holes and tunnels in ripening fruit. Metaldehyde baits or sprays such as Deadline may offer some control of slugs, but the toxicity of this material is a concern near harvest time, especially in pick-your-own fields. Another product, Sluggo, is available for controlling slugs. This is a relatively non-toxic material containing iron phosphate plus wheat-based bait product. It is applied to soil as pellet, and the bait attracts snails and slugs. When eaten, the iron phosphate interferes with calcium metabolism in their gut, causing the snails and slugs to stop eating almost immediately and die three to six days later. It's available from Bioscape 877-246-227 or [www.bioscape.com](http://www.bioscape.com). One study I read from CA showed that 10 lb of Sluggo per acre was as effective as the more toxic metaldehyde at 20 lb per acre.

## **STRIPED CUCUMBER BEETLES**

(adapted from Eric Sideman's MOFGA Pest Report)

Striped cucumber beetles are becoming active around the state and are destroying unprotected cucurbit seedlings. The adult feeding on the cotyledons and young leaves of seedlings is the worst damage. An additional risk with this pest is that the adults carry bacterial wilt and the only management of that disease is the control of the cucumber beetle.

The first line of defense is crop rotation. Adults spend the winter in crop debris and near the old field of cucurbits. Planting cucurbits over in the same field assures an infestation year after year. The cucumber beetle is a fairly good flier, and there is more than one generation per year, but the biggest problem is the early feeding by the overwintering adults and if you can confuse them by moving to a new field each year you may be able to get by. Transplants can tolerate beetle feeding much more than tiny plants from direct seeding. Newly germinating plants are easily killed by an attack nearly as quickly as they break the soil surface.

Protecting small plants from damage by covering with floating row covers as soon as you set out transplants or direct seed. Be sure to completely seal all edges of the cover. Remove the covers at flowering to allow pollination. The kaolin clay product Surround offers some protection. Spaying this white film onto the seedlings as soon as you put them out deters beetle feeding. It's easier to spray trays of small transplants with Surround before you set them in the field. Again, check the Vegetable Guide for insecticide options. Those available for organic growers include pyrethrin (Pyganic), and spinosad (Entrust). Pyrethrin is primarily a contact toxin, while spinosad acts both as a contact and a stomach poison. But, none of these provides a highly effective 'knockdown' of beetle populations.

Still if the beetles have already gotten out of hand and you need to do something they will help. An early morning spray with either of the materials above and then a spray with Surround to deter the beetle's return may be your best bet. No rotenone products are approved for organic production at this time.

*Mention of pesticides is for information purposes only; no endorsement is intended nor is discrimination against products not mentioned. Always read and follow the label.*