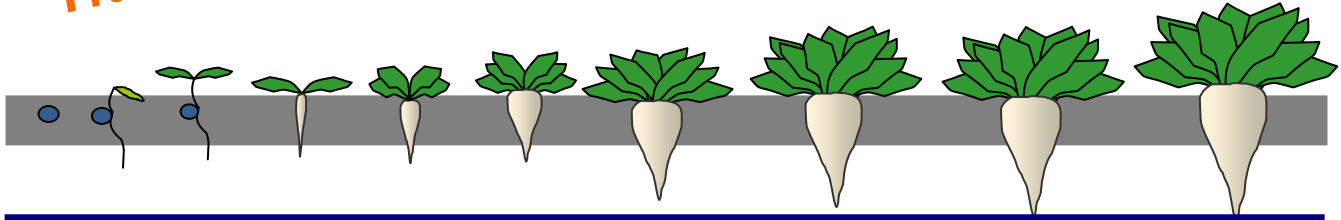


From the Field

Providing Practical, Timely, Useful Crop Production Information

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Not a Normal Year for Insects for 2013

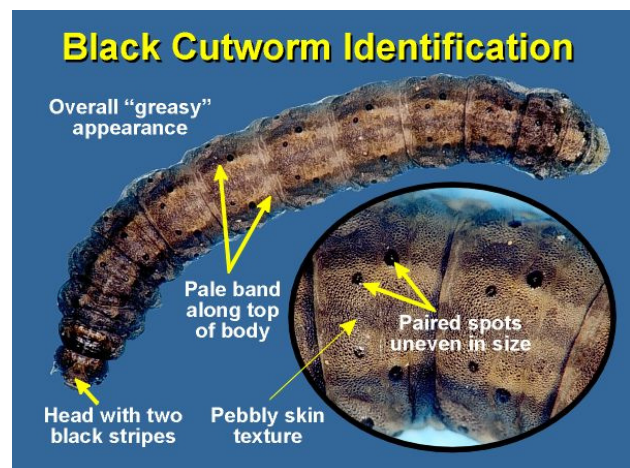
Admittedly, this article's title isn't as catchy as last year's fret about insects becoming worse because of the early start, as we reached May heat units in March! You remember...the 2012 season was 4-5 weeks earlier followed by a mild winter. In hindsight, we know that the drought, coupled with heat caused a reduction in most insect populations in 2012.

Insects can build numbers rapidly after some heavy setbacks. Last year was unkind to many insects. Last year the overall the insect world took a "hit" with last year's drought and heat so they went into winter with fewer numbers. This includes pest, beneficial, and the other insect species. The numbers of our annual-arriving transients into the state, e.g., black cutworm, monitored with pheromone traps haven't been overly impressive to date.

A statement used by Entomologist frequently, "what is predictable about insects is that they can't be predicted." So following last year's drought, a fairly cold winter, and now a wet/cool spring, what would be your projections for this year's insect population? The story will become clearer once we have some crops in the ground. Happy Scouting!

Black Cutworms - *Agrotis ipsilon* (Hufnagel)
The black cutworm doesn't overwinter in Michigan. The bulk of the spring population migrates into Michigan from southern states beginning as early as mid-late March, but not this year due to cold weather. These moths are generally blown into Michigan on southwesterly winds and storm fronts that are common in early spring. Moth flights are generally heaviest in April and May.

There is no "true" economic thresholds have been established for cutworms in sugarbeets and the decision to treat depends on the severity of injury.



However, a general threshold is five percent or more of plants showing cutworm damage. Rescue (foliar) insecticide treatments are the preferred way to manage cutworms because few fields will have a

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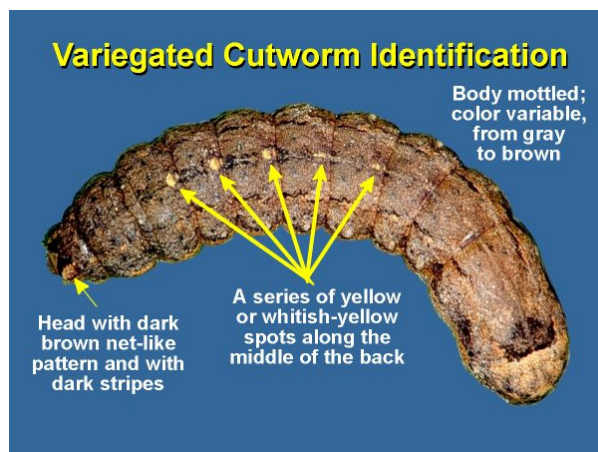
significant problem. Insecticides are most effective if sprayed in the evening when the cutworms are active.

Control:

- Lorsban 4E (Chlorpyrifos)
 - Recommended rate: 2 pts./Ac
- Mustang Max (Pyrethroid)
 - Recommended rate: 2.24-4.0 fl oz./Ac
- Mustang (Pyrethroid)
 - Recommended rate: 2.40-4.3 fl oz./Ac
- Asana XL (esfenvalerate)
 - Recommended rate: 5.8-9.6 fl oz./Ac

Variegated Cutworm - *Peridroma saucia* (Hubner)

Larva: The smooth-skinned larva is pale gray or light brown mottled with dark brown. The first four abdominal segments (at least) bear two yellow or orange dots while the eighth segment is marked with both a black spot and a yellow spot. The mature larva may be as long as 1.5 inches and curls into a C-shaped ball when disturbed.



Management/Scouting:

- Management: Biological - insects, rodents, and birds feed on armyworms and cutworms.
- Cultural: Good weed control can reduce infestation of armyworm and cutworms.
- Sampling/scouting: Check 5 groups of 20 plants for feeding damage. Look around plant base and on the back and front of leaves for larvae.
- Threshold: 25% or more of leaves with feeding damage by armyworms or cutworms.

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Flea Beetles - *Chaetocnema spp.*

Adult flea beetles are small (2-4 mm), oval in shape, and shiny black. They have enlarged hind legs, which allow them to make sudden leaps when disturbed. They can often appear in swarms and are very active during warm, early summer days.



Adult Flea Beetle

Control:

Only directed at the adult flea beetle stage early in the spring when sugar beet seedlings are small and most susceptible to defoliation. Later generations of adult beetles can cause some feeding damage but

sugarbeet plants are able to compensate for this injury through increased summer growth. Controlling weed species such as mustard or lambsquarters so that they do not serve as alternate hosts will also help.

Treatment is usually justified if flea beetles threaten to reduce sugarbeet plant stands to below 35,000 plants/acre.

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 - Recommended rate: 2.40-4.3 fl oz./Ac
- Asana XL (esfenvalerate)
 - Recommended rate: 5.8-9.6 fl oz./Ac
- Carbaryl (Sevin)
 - Recommended rate: 1 qt/acre

Springtails - Collembola

Springtails can vary in color from white to yellow, orange, metallic green, lavender, gray, or red, and has a tiny tube on their abdomen. The name "springtail" refers to an unusual forked organ, the furcula, which arises near the posterior end of some species. It enables them to jump when disturbed. The furcula is usually folded forward along the underside of the body.

Cool and wet soil conditions persist during early spring will be at risk for springtail injury. Warm, dry conditions can force the insect into an inactive state.



Furcula

Above Ground Springtail

Control:

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- Mustang (Pyrethroid)
 - Recommended rate: 2.40-4.3 fl oz./Ac
- Asana XL (esfenvalerate)
 - Recommended rate: 5.8-9.6 fl oz./Ac

Tips for Sugarbeet Pest Control

- Inspect crops regularly during periods of high risk.
- Unseasonable weather can allow early or prolonged pest attacks.
- Use angled nozzles with a fine to medium spray pattern to enhance spray retention and improve pest control for early application to small plants.
- For later applications, when a full crop canopy has established, use sufficient water volumes to ensure thorough crop penetration.