Cutworms, Springtails, and Green Peach Aphids

April 16, 2020



https://pestadvisories.usu.edu/wp-content/uploads/2020/04/April-16-Veg-Pest-Advisory-Audio.m4a

Printable PDF

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Cutworms

Monitoring

Cutworm larvae are active now (seen early as late January into April). They overwinter as the larvae stage in the soil or underneath plant debris. Various species found in Utah include the **Army Cutworm** (*Euxoa auxiliaris*), **Black Cutworm** (*Agotis ipsilon*), **Glassy cutworm** (*Crymodes devastator*), **Pale Western Cutworm** (*Agrotis orthogonia*), and **Variegated Cutworms** (*Peridroma saucia*). Monitor by looking for seedlings that have been cut off, then use a trowel to dig and search for larvae amongst the base soil. Cutworms are most active at night, so searching with a flashlight may help identify populations. Commercial growers should consider treatment when the threshold reaches five larvae per yd².

Damage

Cutworms attack by using their chewing mouthparts to cut the seedlings near the soil surface. This can cause the young plants to fully be cut off. Some species may climb up on the foliage to chew holes or bore into heads of lettuce and cole crops. Damage can ultimately reduce plant stands.

Management

Cultural

• Remove cool-season garden weeds such as lambquarters and wild mustards that are growing near your field edges or garden. These weeds can serve as an alternate host. Sites with an early-season weed infestation are often more susceptible.

• Protect seedlings by using cardboard collars, screens, and protective cloths at the base of the plants. These barriers should be at least 2-3 inches tall and pushed firmly in the soil to prevent cutworms from crawling under.

Biological

- Wild birds often feed on cutworm larvae.
- Larvae may be parasitized by beneficial insects such as braconid wasps (*Apanteles*) and tachinid flies.
- Parasitic nematode (Steinernema carpocapsae)

Chemical

- BioAdvanced® Vegetable and Garden Insect Spray (cyfluthrin)
- Safer[®] Insecticidal Soap, Natria[®] Insecticidal Soap (insecticidal soap)
- Bonide® Thuricide®, Safer® Caterpillar Killer with Bt (*Bacillus thuringiensis*)
- Blackhawk®, Entrust®, Success® (spinosad)
- Radiant® (spinetoram)
- Brigade[®], Capture[®] (bifenthrin)
- Azera® (pyrethrins + azadirachtin)
- XenTari®, Biobit® (Bacillus thuringiensis)



Black cutworm larva (Adam Sisson, Iowa State University, Bugwood.org)



Glassy cutworm larva (Joseph Berger, Buwood.org)



Variegated cutworm larva (Frank Peirs, Colorado State University, Bugwood.org)



Army cutworm larva (Joseph Berger, Bugwood.org)



Pale western cutworm larva (Frank Pearis, Colorad State University, Bugwood.org)



Close up of a cutworm's chewing mouth parts (GrowingProduce.com)



Cutworm damage on young plant (Clemson University - USDA Cooperative Extension Slide Series, Bugwood.org)



Cutworm and damage to cereal seedling (agric.wa.gov.au)



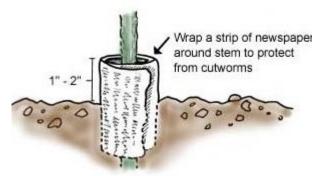
Cardboard collar to prevent cutworms (Mother Earth News)



Cutworm chewing young seedling (Clemson University - USDA Extension Slide Series, Bugwood.org)



Cutworm damage on young potato (Minnesota Extension)



Protecting seedlings from cutworms (National Gardening Association)

Springtails

Monitoring

Springtails are currently being seen feeding on brassica seedling. Springtails overwinter as "resting" adults right below the soil surface. They range from 1.5-3.2mm long, are grey, and have a unique tail-like structure (furcular) that hooks underneath their bodies. Monitoring when soils are wet (after rain) and there is lots of organic matter present.

Damage

Springtails can have specialized piercing-sucking mouthparts that allows them to cause damage to roots and first leaves of germinating seedlings. This ultimately leads to a loss in plant vigor and reduced stands.

Management

Chemical control is not recommended. Other control measures are rarely needed

Cultural

- Reduce moisture and excess organic matter.
- In greenhouses, wipe up pest colonies around the rims of the trays.





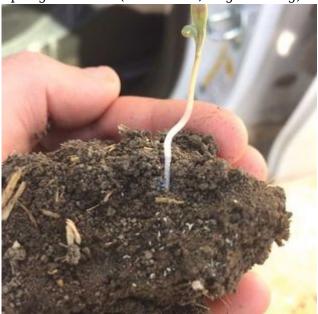
Springtails caught in home made trap in Salt Lake County



Springtails caught in home made trap in Salt Lake County



Springtails Adult (Susan Ellis, Bugwood.org)



Springtails in soil near seedling



Springtails damage to seedling (Minnesota Extension)



Springtails Damage (Minnesota Extension)

Green Peach Aphid

Monitoring

Green peach aphids (*Myzus persicae*) along with other aphid species are of concern starting now in mid-April through the rest of the season. Green Peach Aphids lay their eggs to overwinter on woody hosts such as peach, apricot, and plum trees. As the temperature warms they will migrate to various broadleaf weeds and vegetables, notably spinach, carrots, lettuce, and peas. Start scouting now through May. Identify clusters on the plant along with honey-dew excretion left by aphids.

Damage

Green peach aphids feed on host plants with their piercing-sucking mouthparts. They can attain high densities on younger plant tissues which may lead to water stress, wilting, and a reduced growth rate. Stippling, chlorosis, and leaf curling are other symptoms displayed by host plants. Green peach aphids are responsible for transmitting several viruses to vegetable crops.

Management

Cultural

- Avoid excess fertilization as aphids are attracted to high nitrogen levels.
- Start to remove weeds in and near the growing site.

Biological

• Encourage natural enemies (lady beetles, parasitic wasps, etc.). Typically appear as the temperature begins to warm.

Chemical

- Evergreen®, Pyganic®, Tersus® (pyrethrins)
- Azera® (pyrethrins+azadirachtin)

- Aza-Direct[®], AzaGuard[®], Azatin[®], Molt (azadirachtin)
 Spectracide[®] Triazictide[®]
 GardenTech[®] Sevin
 Safer[®] Neem Oil (oils)



Green peach aphid adults (Jim Baker NCSU, Bugwood.org)



Green peach aphids



Winged green peach aphid (Scott Bauer, USDA, Bugwood.org)



Green peach aphid damage on brassica (Virginia Tech)



Green peach aphid's sucking-piercing mouth part (SciencePhoto.com)



Aphid damage to leafy vegetables (GrowingProduce.com)

Note: All brands are registered trademarks. The brands listed in this table are not all-inclusive, but are meant to provide examples of products to control these pests in Utah. Always check the label for the specific crop you are treating, application and safety information, and protection and pre-harvest intervals.