

Integrated Pest Management Program Department of Plant Science and Landscape Architecture

Department of Plant Science and Landscape Architecture UConn Extension

Greenhouse Pest Message August 4, 2022 Leanne Pundt, UConn Extension

Drought and Heat Stresses

Spider mites and **thrips** are loving this hot, dry weather. For more on spider mites, see <u>June 20, 2022</u> message and for thrips, the <u>June 10, 2022</u> pest message.

The continuing drought and heat waves are stressing plants and people alike. Plant roots are generally less tolerant of temperature extremes than plant leaves and stems. When plants are in well mulched garden beds, the large volume of soil helps buffer plant roots from temperature extremes. But, when plants are grown in black plastic containers in the full sun, heat absorption on the container side walls may result in root zone temperatures that stress plant roots. Temperatures from 104 F and up to 120 F have been reported in woody ornamentals in container nurseries. (see reference below). Indirect damage from heat stresses may include reduced plant vigor, nutritional disorders, and increased susceptibility to root rot diseases.

Light colored containers will reflect more sunlight than darker containers. For example, the inside of white or green containers may be 9 to 18 F cooler than the inside of black colored containers. Fiber pots absorb less radiant energy than plastic pots.

For more: Reducing Heat Stress to Container Grown Plants University of Kentucky <u>http://www2.ca.uky.edu/agcomm/pubs/HO/HO119/HO119.pdf</u>

Garden mums on black fabric cloth are stressed during this continuing heat. Young wounded root tips are susceptible to *Pythium aphanidermatum* or "Hot Weather" Pythium. Check your plant roots, especially on slower growing varieties or plants showing wilting. Growing mums with stressors such as poor drainage, high summer temperatures (*P. aphanidermatum* prefers temperatures between 95 -104° F) and concentrated high salts all encourage Pythium root rot.

Garden Mums: Past Crop Problems and Production Tips <u>https://ag.umass.edu/greenhouse-floriculture/fact-sheets/garden-mums-past-crop-problems-production-tips</u>

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Caterpillars on Ornamental Kale and Cabbage

Look for the familiar imported cabbageworms adults fluttering above ornamental cabbage and kale. The adult is a white, butterfly with yellow on the underside of its wings. Their velvety-green larvae have a delicate yellow line that runs lengthwise down the center of their body. Look for the larvae and signs of their feeding damage (irregular holes in the leaves, and dark green droppings) on ornamental kale and cabbage.



Figure 4 and 5: Adult cabbageworms (on left) and larvae (on right). Photos by L. Pundt

Bacillus thuringiensis (B. T) subsp. kurstaki (Deliver, Dipel Pro DF, Javelin WG, Thuricide N/G, BT Now) can be used against the young, small actively feeding caterpillars. (spray when temperatures are lower - hopefully by next week). BT must be ingested to be effective so thorough coverage is needed. It may need to be reapplied more frequently when used outdoors, as UV light and rainfall may shorten its residual activity. Conserve (Spinosad) (IRAC 5) is also labeled for many Lepidoptera larvae. For a complete listing of materials labeled for caterpillars, see the latest edition of the New England Greenhouse Floriculture Guide. <u>https://greenhouseguide.cahnr.uconn.edu/</u>

Funding provided by USDA NIFA CPPM grant 2021-70006-35582.

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