



UConn Diagnostic Summary for July 2018

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Dept. of Plant Science and Landscape Architecture, Home & Garden Education Center/Plant Diagnostic Laboratory Not for publication or reproduction without permission of the author. August 9, 2018.

Frequent reports: Fall webworm, Scarabidae beetles (Oriental, Asiatic, June, Japanese, etc), cedarapple rust, powdery mildew on cucurbits, lily leaf beetle, tobacco budworm (on petunia and geranium), fungal leaf spots of tomato and other plants, black rot of grape, blossom end rot of tomato, anthracnose diseases.

Alerts and News:

Cucurbit downy mildew, a serious disease has been reported in Massachusetts as of this week. No reports in Connecticut so far but it's probably here. The pathogen, *Pseudoperonospora cubensis*, does not overwinter in the north so it tends to arrive later in the season. Symptoms and signs include angular leaf spots and dark sporulation of the pathogen on the lower surface of the leaves in association with the leaf spots. Leaf spots enlarge and coalesce, resulting in browning and death of entire leaves and later the whole plant. More information and images: http://msue.anr.msu.edu/news/managing cucurbit downy mildew in your garden

New this month: More topics, including those highlighted in images, are hyperlinked to additional information.

<u>Disease of the Month</u>: Black rot of grape (*Guignardia bidwellii*) was identified on samples in the UConn lab and Master Gardener clinics in Fairfield and Middlesex Counties in July. This is one of the most serious diseases of grape in the northeast. Infections and symptoms occur on leaves, fruit and green shoot tissue. Leaf spots and rotting fruit have numerous black fungal fruiting bodies. More information: <u>Disease Control in</u>





Photos from left: Black rot of grape symptoms on leaves and fruit (Purdue University photos).

Arthropod of the Month: Click beetles (family Elateridae) were identified this month at the UConn Home & Garden Education Center and in New Haven County and are known for their ability to produce a 'click' as described here from Wikipedia "A spine on the prosternum can be snapped into a corresponding notch on the mesosternum, producing a violent "click" that can bounce the beetle into the air. Clicking is mainly used to avoid predation, although it is also useful when the beetle is on its back and needs to right itself." One of the most striking is the eyed elater which looks like it has large eyes on its thorax in an effort to scare off predators by mimicking a larger (and either scarier or less appetizing) animal.



The eyed elater click beetle and an iridescent species (photos from bugguide, net and pestWiki, respectively.

Plant of the Month: Virginia mountain mint (*Pycnanthemum virginianum*.), is a wildflower native to the eastern Unitied States. It prefers moist areas and is attractive to butterflies, bumble bees, honeybees and native bees, along with other beneficial insects. It was identified in Litchfield County this month.



Virginia mountain mint leaves and flowers from https://www.wildflower.org

Reports by Location

UConn Plant Diagnostic Laboratory/Home & Garden Education Center

Arthropods on plants

Cross-striped cabbageworm on cabbage
Borer in black knot on plum
Fall webworm on blueberry, beech
Parsleyworm on dill
Stink bug nymphs on tomato
Flea beetle injury on tomato
Eastern tent caterpillar on apple
Rudbeckia psyllid injury (pictured below, J. Allen photo)



Whitefly on spicebush Cottony maple scale on cherry Milkweed tussock moth caterpillars (2) Spider egg masses on Japanese knotweed Mealybug on bean (suspected) Tumbling flower beetle on elderberry Japanese beetle on rose Eriophyid mites on river birch Aphids on lettuce Two-spotted spider mite on bean Thrips on Allium, pepper Aphids on birch Squash bug eggs on zucchini Squash vine borer on pumpkin Ambush bug on tomato Blackberry psyllid (suspected from image) Milkweed bug nymph on cucurbit Colorado potato beetle larvae Oriental fruit moth larva in peach fruit Clear wing moth on strawberry Asiatic garden beetles Tobacco hornworm Crowned slug moth caterpillar on cabbage Garden fleahopper on Nepeta (catnip)

Arthropods - other

Elateridae Pill bugs Hickory tussock moth caterpillar Prionid beetle Leafhopper-hunting wasp Green June bug Carpet beetle larva Packard's lichen moth Western conifer seed bug Mosquito larvae Click beetle Pandora sphinx moth Stag beetle

Plant Diseasess

Rhizoctonia root/crown rot on lavender, Dahlia, Allium, Pachysandra (Japanese), Coreopsis Rhizoctonia web blight on aster

Black root rot on phlox (2)

Newly molted dragonfly

Black knot on plum

Pestalotiopsis leaf blight on Rhododendron

Pestalotiopsis leaf spot on Hypericum

Fusarium root rot on Echinacea 'Flamenco'

Fusarium wilt/rot on Sedum 'Autumn Joy'

Phomopsis dieback on privet

Early blight on tomato (Suspected from image)

Oak leaf blister

Volutella blight on boxwood (3)

Botrytis gray mold on strawberry

Mycosphaerella leaf spot on strawberry

Anthracnose on cucumber

Septoria leaf spot on Pachysandra procumbens

Pyricularia leaf spot on Hakonechloa

Pythium root rot on Hakonechloa

Botryosphaeria on boxwood (3), holly, azalea

Fusarium on boxwood

Black rot of grape

Dutch elm disease on American elm

Gymnosporangium rust on apple, crabapple

Rose rosette virus on rose (pictured below with 'witches brown and abnormal flowers on left of the plant, J. Allen)



Phytophthora root rot on lavender, Heucherella Bacterial wilt on winter squash, zucchini Frog-eye leaf spot of apple Apple scab on crabapple Unidentified dieback on azalea, rhododendron Pythium root rot on Miscanthus Bacterial leaf spot on Echinacea, fern, Salvia, Alchemilla, Nepeta, vinca



J. Allen photo

Stagonospora leaf spot on Pennisetum Impatiens necrotic spot virus (INSV) on staghorn fern

Plant ID

Hemerocallis sp. Nightshade Tall blue lettuce Wild radish Redroot pigweed Wineberry Purslane

Purple loosestrife

Virginia creeper (2)

Moss

Willow

Jade plant

Hydrangea macrophylla

Mulberry

Oriental bittersweet

Poison ivy

Ground ivy (creeping Charlie)

Enchanter's nightshade

Monarda

Cultural Problems

Nutrient toxicity in greenhouse tomato Abiotic leaf discoloration on Rudbeckia, Echinacea High ammonium nitrogen and high pH in mums Winter injury on boxwood (suspected) Suspected cold temperature injury on Kousa dogwood Abiotic leaf scorch on climbing hydrangea Iron deficiency in Vinca minor Suspected nutrient deficiency in flowering dogwood Blossom end rot of tomato Captan injury to apple fruit (suspected) Blotchy ripening (physiological mottling) of greenhouse tomato

Suspected spray injury on marigold and zinnia

Other

Polymer crystals in lawn Stinkhorn fungus in garden

Fairfield County (submitted by Thomas MacGregor)

Arthropods on Plants: Fall webworm, *Hyphantria cunea*, on apple, blueberry, and Kousa dogwood; hornworm, *Manduca quinquemaculata*, on tomato; leafminer on clematis; insect damage on coneflower; tent caterpillars on dogwood; giant root borer, *Prionus sp.*, in garden; chinch bugs in turf; Asiatic garden beetles on marigolds and geraniums; Asiatic garden beetles and slugs on coneflower; tobacco budworm caterpillar on petunias; plum curculio, *Conotrachelus nenuphar*, with gummosis and hemlock woolly adelgid, *Adelges tsugae*.



Chinch bug damage to a lawn (Univ. of Illinois) and close-up of a nymph (left with short wing pads) and adult chinch bug (from Turf Magazine).

Arthropods (other): eastern cicada killer; polyphemus moth, *Antheraea polyphemus*; anobiid powderpost beetles, green June beetle, *Cotinus nitida*; rove beetle; ichneumon wasp; blue mud wasp; grass carrying wasp; ant; and unicorn caterpillar moth.

Plant Diseases: black rot on grapes; *Septoria* leaf spot on tomato; *Alternaria* on tomato; cedar-apple rust (2), *Gymnosporangium juniperi-virginianae*; powdery mildew on squash; *Cercospora* leaf spot on Rhododendron; cucurbit scab;; *Pestalotiopsis funerea* on arborvitae; clematis wilt; geranium fungal infection; and *Stigmina* needlecast on blue spruce.

Plant ID: Mile-a-minute vine, Persicaria perfoliata in Brookfield (reported); Virginia creeper; Hibiscus moscheutos; Hibiscus syriacus; purslane, Portulaca oleracea; Indian pipe plant, Monotropa uniflora; pokeweed, Phytolacca americana; Oriental bittersweet, Celastrus orbiculatus (3); pignut hickory, Carya glabra; Eastern red cedar, Juniperus virginiana; bee balm; ginkgo; black cherry; sugar maple; American beech, Fagus grandifolia; Prunella; mugwort, Artemisia sp.; crabapple; stilt grass, Microstegium vimineum (2); Bishop's weed, Aegopodium podagraria; clearweed, Pilea pumila; black elderberry; cow parsnip; jewelweed; red root pigweed, Amaranthus retroflexus; willow; goldenrod; and Hepatica.



Jewelweed in flower

(https://www.fs.fed.us/wildflowers/plant-of-the-week/impatiens_capensis.shtml)

Cultural: pond scum; catfacing on tomato; Hosta leaf scorch; spring annuals early death; tomato blossom end rot; tomato physiological leaf curl (2).

Other: sapsucker damage on apple tree; deer (2).

Hartford County (no report)

<u>Litchfield County</u> (submitted by Michelle Winkler)

Arthropods on Plants

Elderberry borer

Brown hooded owlet moth caterpillar (Pamm Cooper,

UConn)



Japanese beetle damage

June bug on vegetable plants Fall webworms

Plant Diseases

Powdery mildew on cucumber and dahlia

Plant ID

Liverwort Virginia mountain mint Elephant garlic

Cultural

Drought damage on kousa dogwood

Middlesex County (submitted by Gail Reynolds)

Insects and Arthropods on Plants

Cranberry fruitworm in blueberry



Image: Phylloxera galls with sporulation of grape downy mildew (whitish covering). Photo: Casey Lambert, UConn

Sawfly larvae on dogwood Aphids on dogwood Scale insects on lime tree Tobacco budworm on geranium Dagger moth caterpillars on oak Woolly adelgid on hemlock Fall webworm on dogwood

Insects and Arthopods (other)

Black cutworm Definite tussock moth caterpillar Saltmarsh moth caterpillar Virginia tiger moth caterpillar

Gypsy moth male Lily leaf beetle Fall webworm caterpillar June beetle

Plant Diseases

Wilt of cucumber
Cedar-apple rust
Needlecast of white pine
Suspected Verticillium wilt of raspberry
Fungal spot on tomato leaves
Black rot of grape

Plant and Weed ID

Green ash
Japanese stiltgrass
Wild lettuce (2)
Common violet
Mugwort
Horseweed
Dodder
Many "not giant hogweed"

Cultural

Oak mortality most likely due to several years of defoliation and drought

Blossom end rot on tomatoes



Redbud mortality likely due to planting in direct sun Tomato flower loss due to heat Dahlia under-watering

Other

Vole root damage on mountain laurel Cowbird egg

New Haven County (submitted by Jude Hsiang)

Arthropods on Plants:

Tomato hornworm on tomato plant Lilioceris lilii, Scarlet lily beetle on lily Tetraopes tetrophthalmus, red milkweed beetle on milkweed

Arthropods, other:

Boisea trivittata, Boxelder bug Elateridae, Click beetle Lucanidae, Stag beetle

Plant Disease:

Sooty mold on *Ficus* sp Septoria leaf spot on tomato Basil leaf spot on *Ocimum basilicum* Anthracnose on *Cornus florida*



Rhizosphaera needlecast on spruce, *Picea* sp. Powdery mildew and blossom rot on zucchini *Botrytis* on peony *Chrysomyxa* rust on *Rhododendron* sp.

Plant and Weed ID:

Juniperus virginiana, Eastern red cedar Abutilon theophrasti, Velvet leaf Ocimum basilicum, basil Alliaria petiolata, garlic mustard
Betula albosinensis, var., Chinese red birch
Centaurea maculosa, spotted knapweed
Ampelopsis brevipedunculata, porcelain berry
(photo above right from Invasive Plants Association of Wisconsin)



Viburnum acerfolium, maple leaf viburnum
Solidago sp., golden rod
Lonicera morrowii, Morrow's honeysuckle
Morus alba, white mulberry
Acanthus spinosa, spiny bear's britches
Ilex glabra, inkberry
Euonymus japonicus, euonymus, variegated
Apocynum cannabinum, hemp dogbane or Indian hemp
Spiraea japonica, Japanese meadowsweet
Robinia pseudoacacia, black locust
Smilax sp, greenbrier
Lonicera sp, honeysuckle
Forsythia sp, forsythia
Fallopia japonica, Japanese knotweed, variegated
Malus, crabapple

Other:

Solanum dulcamara

ID mushroom the dog ate – referred to CAES, COMA or Valley Mycological society

New London County (submitted by Paul Armond)

Arthropods on plants

Oriental beetle
Squash beetle
Western flower thrips
Gypsy moths
Grapevine beetle
Fir tussock moth caterpillar
Willow leaf beetle larvae

Other Arthropods

Male eastern Dobsonfly (pictured right, J. Allen) Sarcophagid fly

Plant Disease

Cedar-apple rust

Plant ID



<u>Houttuynia cordata</u> 6

Tolland County (no report)

Windham County (no report)

Bartlett Arboretum, Stamford (no report)