



# **UConn Diagnostic Summary for June 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 of Plant Science and Landscape Architecture, Home & Garden Education Center/Plant Diagnostic Laboratory Not for publication or reproduction without permission of the author. July 9, 2018.

**Frequent reports:** Gymnosporangium rusts, sawflies on numerous hosts, spider mites, fungal leaf spots, Phytophthora and other root rots, cottony camellia scale on holly, boxwood psyllid, anthracnose diseases, leafminers.

### Alerts and News:

- **Spotted lanternfly** is a new pest of many deciduous trees including fruit trees and grapes. Its preferred host is the invasive tree of heaven (*Ailanthus altissima*). It is currently established and under eradication and quarantine in southeastern Pennsylvania. It has been found in a couple of other states so far but not known to be established (likely hitchhikers). It's a striking insect and easy to identify, especially in the adult stage. Become familiar with it and when the different life stages are active at this great video produced by the Pennsylvania Dept. of Agriculture and Penn State Extension. If you think you've seen one in CT, contact the UConn Plant Diagnostic Lab, Home & Garden Education Center, or the Entomology Department at The CT Agric. Experiment Station.
- Late blight of tomato and potato caused by *Phytophthora infestans* was reported in late June in upstate NY. No additional reports have occurred since then. Watch for these <u>symptoms and signs</u> of the disease, especially following wet weather. Risk is not considered high at this time in Connecticut.

**Disease of the Month: Root-knot nematode** (*Meloidogyne* sp.) was confirmed on Astilbe from a home garden maintained by a landscape company this month in the diagnostic lab. This nematode, probably the northern root-knot nematode (*M. hapla*), has a broad host range. Above ground symptoms include wilt, poor growth, stunting, dieback, and reduced flowering or fruit production. The females select a permanent feeding site within the root and this activity results in swellings or 'knots' on the root at the site. Each knot can contain multiple females. Astilbe is quite susceptible. A <u>study</u> was done in a greenhouse setting to evaluate susceptibility of many herbaceous perennials. There are no effective chemical controls for this in the home landscape. Options include replanting with tolerant/non-host plants, replacing the soil (if in a limited, manageable area), and promoting vigorous plants that can tolerate a bit more feeding by this pathogen. A cover crop of certain types of marigold can help reduce populations in the soil. Intercropping does not work. More information: <u>https://hort.uwex.edu/articles/root-knot-nematode/</u>



Photos from left: Swellings on Astilbe roots, female root-knot nematode in gall at arrow (J. Allen photos).

**Arthropod of the Month: Beet and spinach leafminers** are the larvae of small grayish brown flies. There are two species. They prefer the host of their common name but will attack both of these and the related Swiss chard. Damage is most important on crops like spinach and chard where the leaves are the crop. Eggs are laid on leaf undersides and the newly hatched larvae (maggots) burrow into the leaves where they feed between the upper and lower epidermal layers. Damage appears as tan to whitish mines expanding to blotches over time. Mature larvae drop to the ground to pupate. There are multiple generations per season. More info: https://ag.umass.edu/vegetable/fact-sheets/leafminer-beet-spinach



Early tunneling and more advanced, severe damage on spinach. J. Allen photos.

**Plant of the Month: Mulberry** (*Morus* sp.), specifically white mulberry in one case, was identified in the New Haven office. These are relatively small trees with variably lobed, serrated leaves. *Morus rubra*, red mulberry, is native to the eastern U.S. White mulberry has striking white fruits. Notable facts: Fruits are high in vitamin C, the leaves are the food source for the silkworm, and the dark colored fruits are used in making dyes. More information:

https://en.wikipedia.org/wiki/Morus\_(plant) and http://hort.uconn.edu/detail.php?pid=291



Leaves (www.hort.uconn.edu) and fruit (https://foodtolive.com) of white mulberry.

# **Reports by Location**

# UConn Plant Diagnostic Laboratory/Home & Garden Education Center

### Arthropods on plants

Plum curculio on peach, plum (3), nectarine Fletcher scale Chard leafminer Rose slug sawfly (2) Birch erineum galls Viburnum leaf beetle Viburnum borer Oak apple gall Birch sawfly Clavate tortoise beetle on tomato Flea beetle injury on tomato (2) Three-lined potato beetle on ground cherry Citrus psyllid on lime (suspected) Whitefly on boxwood Thrips on tomato (2), verbena Grape gall midge Boxwood spider mite Pinion caterpillar on Stewartia Four lined plant bug injury on herbs (suspected) Hydrangea sawfly Canna leaf roller Boxwood psvllid Eriophyid mites on Asian pear Peach borer Squash vine borer adult Spruce spider mite on white spruce Black swallowtail caterpillar (parsleyworm0

#### Arthropods - other

March fly Wood cockroach Fly (Order Diptera) Firefly White marked tussock moth

#### **Plant Diseasess**

Cherry leaf spot/shothole Orange rust on black raspberry Fire blight on Bradford pear, sand cherry, weeping cherry Cladosporium leaf spot on peony Anthracnose on weeping cherry, crabapple, red oak, raspberry, pear Phomopsis dieback on rhododendron (3), privet, Japanese maple Needlecast of E. white pine (Lecanosticta acicula) Black root rot of strawberry (Rhizoctonia) Bacterial leaf spot on hosta, zinnia, magnolia, hibiscus, lavender Pestalotiopsis leaf blight of rhododendron (3) Phomopsis dieback on raspberry Red thread of turfgrass Hendersonia leaf spot of hawthorn Spot anthracnose on linden Scab on crabapple Cedar-quince rust on Juneberry, Cleveland Select pear Phytophthora root/crown rot on juniper, Russian cypress Procera root rot on E. white pine Cercospora leaf spot on rose (suspected) Leaf spot on maple Fusarium root/crown rot on tomato Frogeve leaf spot on apple Lophodermium needlecast on mugo pine Virus suspected on dahlia Tomato spotted wilt virus on Gaillardia Black rot of grape Rhizoctonia crown rot on tomato Black knot of plum Phyllosticta leaf spot of maple

Powdery mildew on peony, pear Root-knot nematode on astilbe Phytophthora root rot on heuchera Root rot (unidentified cause) on Juniper Rhizoctonia root rot of magnolia (seedlings) Botryosphaeria canker/dieback on rose Entomosporium leaf spot on Bosc pear Alternaria leaf spot/blight on privet Brown rot (Monilinia sp.) on peach Azalea gall Garlic bloat nematode on garlic Black root rot (Thielaviopsis basicola) on Clematis Alternaria leaf spot on miscanthus Tar spot of Calamagrostis Bacterial soft rot of Disa orchid Fusarium root rot on Colorado blue & white spruce transplants Rose rosette virus (Confirmed) on rose (3)

#### **Plant ID**

Linden Birch Clematis Maple leaf viburnum (2) Bittersweet nightshade (2) Coltsfoot Horsetail Japanese knotweed Smilax herbacea Poison hemlock Oriental bittersweet May apple Green ash Spicebush Horseradish Poison sumac Deutzia magnifica Cow parsnip Multiflora rose Wild angelica Wild lettuce Coreopsis Doveweed Wild blueberry Poison ivy Yellow foxglove Penstemon Dianthus

### **Cultural Problems**

Nutrient deficiency (several) Herbicide injury suspected (several) Winter injury suspected on long stalk holly, chamaecyparis, Suspected sunburn on dogwood Abiotic leaf scorch on Stewartia

#### Other

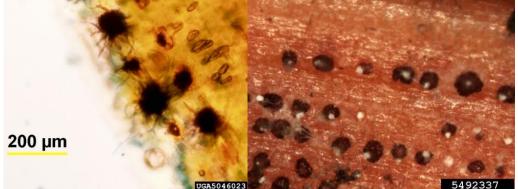
Suspected squirrel damage Dead man's fingers fungus in mulch

# Fairfield County (submitted by Thomas MacGregor)

**Arthropods on Plants:** Fall webworm (*Hyphantria cunea*); aphids; spider mites on boxwood (2); psyllids on boxwood; Hibiscus sawfly; rose slug sawfly; asparagus beetle larvae; pine bark adelgids; leafhoppers on *Malus* sp.; wireworm on potato; Christmas fern fronds containing *Herpetogramma* sp. larvae; flea beetles on tomato; borers in spruce trees; elongate hemlock scale; cottony camellia scale on holly;.

Arthropods (other): centipede; mealy bug egg sacs; robber fly.

**Plant Diseases:** Feathery pycnidia of *Stigmina lautii* needlecast (pictured below next to the pycnidia of *Rhizosphaera kalkhoffii*) on spruce; anthracnose on *Cornus florida*; fungal disease on hydrangea; fungal disease on boxwoods (2); Phytophthora root rot of azalea (suspected); cedar apple rust; Septoria leaf spot on *Rudbeckia* sp. (2); anthracnose on Hosta sp.; azalea leaf gall; black knot on plum (2); cherry leaf curl (2); fungus on Rhododendron sp.; Volutella blight on boxwood; apple scab on *Malus* sp.; leaf curling on *Malus* sp.; brown rot of ornamental cherry; Botryosphaeria canker on *Ilex verticillata*; Phomopsis tip blight on 'Blue Rug' juniper; fungal disease on Himalayan "Sweet Box".



Stigmina pycnidia (Joseph OBrien, USDA Forest Service, Bugwood.org) on the left and those of R. kalkhoffii on the right (Sandra Jensen, Cornell University, Bugwood.org).

**Plant ID:** Mother-in-law's tongue (Sansevieria trifasciata); tall fescue; *Viburnum dentatum*; *Viburnum nudum*; *Valeriana officinalis*; pilewort (*Ficaria verna*); Tupelo tree; Black cohosh (*Actaea racemosa*); winged euonymus; autumn olive; mugwort; horsetail; ragged robin (*Lychnis flos-cuculi*); creeping Charlie (*Glechoma hederacea*); Virginia creeper; pokeweed; Tree of heaven; catbriar (*Smilax rotundifolia*); white fir (*Abies concolor*); *Monarda* sp.

**Cultural:** physiological blossom drop and leaf curl; sunburn on Rhododendron sp. (3); leaf scorch on Hydrangea sp.; leaf scorch on daisy; root rot of African violet; lawn chemical injury to weeping cherry tree; winter sun damage on evergreen.

Other: raccoon scat in swimming pool; sapsucker damage.

# Hartford County (no report)

# Litchfield County (no report)

Thanks to Dave Lewis for his contributions and best wishes as he moves on to new endeavors!

# Middlesex County (submitted by Gail Reynolds)

Arthropods on Plants Wool sower gall Oak leafroller caterpillar (pictured below by Paul Stacey)



Wireworms on radish Peach tree gall Grape gall midge Rose sawfly larvae (3) Lily leaf beetle (2) Elderberry sawfly larvae on elderberry Pine sawfly larvae on mugo pine Spider mites on *Cryptomeria* Scale on *Cryptomeria* Maple bladder galls (2)

### Arthopods (other)

Bald faced hornet Mining bee Woolly bear (cocoon) Carpet beetle Fur beetle Sawtooth beetle Sugar ant Cockroach Millipede

#### **Plant Diseases**

Witch hazel blight on *Hammamelis vernalis* Leaf spot on rhododendron Oak anthracnose Red cedar decline Dutch elm of American elm (Liberty elm variety) (2) Cedar hawthorn rust on *Amelanchier* Sooty mold on *Ilex Septoria* leaf spot on tomato Cherry shothole Fungal disease on strawberry Bud blast on peony Suspected *Fusarium* wilt of tomato

### New Haven County (submitted by Jude Hsiang)

### **Arthropods on Plants:**

Rose sawfly (3) on *Rosa* Elm cockscomb gall on *Ulmus* Cottony scale on *Rosa* Cottony camellia scale on *Ilex* (Female and completed white egg sac pictured below)



J.A. Davidson, Univ. Md, College Pk, Bugwood.org

Brown soft scale on x *Citrofortunella mitis*/calamondin Sooty mold on x *Citrofortunella mitis*/calamondin Leafminer on arborvitae Spider mites on *Rosa* Bagworm on *Prunus* 

Arthropods other:

### Blossom wilt of cherry

### Plant ID

Black swallowwort Heracleum maximum Perennial ryegrass Creeping bentgrass Podophyllum peltatum Prunus sp. (ornamental)

#### Cultural

Woodpecker damage on house Natural fuzz on rhododendron leaves Rhododendron winter damage Harry Lauder walking stick root sucker not showing contortion

Deer tick nymph Carpet beetle

### **Plant Disease:**

Botrytis on *Rosa* Botrytis on *Paeonia* Rose stem canker on *Rosa* Rose rosette virus on *Rosa* (suspected) Black knot on *Prunus* 

#### Plant and Weed ID:

Sonchus arvensis/perennial sowthistle Fraxinus nigra/black ash Fraxinus americana/white ash Fraxinus pennsylvanica/green ash Thymus sp./thyme Polyganum persicaria/lady's thumb Fagus sylvatica/European beech, weeping cultivar Morus alba/white mulberry Carya ovata/shagbark hickory Aralia spinosa/ devil's walking stick Trifolium repens/white clover (2) Verbena sp. Morus sp. Robinia pseudoacacia/ black locust (2) Smilax sp./greenbriar Lonicera sp. Forsythia sp. Fallopia japonica/Japanese knotweed, variegated variety Celastrus orbiculatus/Oriental bittersweet

#### Cultural/abiotic problems:

Insufficient watering of zucchini Insufficient watering of turf grass Dahlia tuber without eye planted

#### Other:

Possible borer damage on maple: referred to arborist Snails in garden

## New London County (submitted by Paul Armond)

Arthropods on Plants:	
Hickory leaf gall	Botrytis rot on gladiolus
Beet leafminer	Heterosporium leaf spot on iris
	Bacterial leaf spot on Bradford pear, Hamamelis
Arthropods, other:	(suspected)
White-marked tussock moth caterpillar	Phytophthora on Salix (suspected)
	Early blight on tomato
Plant Disease:	Mummy berry on blueberry (2 phases shown below) 5



Mummy berry shoot blight (left) and berry symptoms (right) from https://s3.wp.wsu.edu/uploads/sites/2091/2017/05/5Mummyberry3.jpg

Tolland County (no report)

Windham County (no report)

Bartlett Arboretum, Stamford (no report)