



# Hort Notes

An educational newsletter with research-based information for businesses and individuals involved in selling, planning, designing, servicing, and enjoying landscapes and gardens.

---

Volume 12, Number 10  
www.UMassGreenInfo.org  
July 9, 2001

## Current Monitoring Checklist:

[http://www.umassgreeninfo.org/fact\\_sheets/ipmtools/800\\_999\\_GDD.html](http://www.umassgreeninfo.org/fact_sheets/ipmtools/800_999_GDD.html)

**PLANT PHENOLOGY: BETWEEN 800 - 999 GROWING DEGREE DAYS**

---

## Spiders: Friends, not Foes

Spiders are unfairly criticized animals. They have been victimized by a few poisonous species, condemned when found around the home, and demonized at Halloween. However, spiders are finally gaining recognition as important beneficial predators of insect pests in the landscape, as well as in farms, orchards, and forests.

The fear of spiders (e.g. the “Little Miss Muffet Syndrome”) is usually a learned response from others, often learned in childhood. Most spiders are shy animals that run away from humans. The vast majority pose no danger at all. Even the poisonous spiders -- notably the black widow and the brown recluse -- are not aggressive and frequent undisturbed areas. Spiders only bite people in self defense or when defending their eggs. In fact, research shows that spiders are often blamed for bites caused by fleas or other pests.

Many people notice an influx of spiders around the home in the fall. This is the time of year that some species mature. Mating must take place in order for egg laying to occur before the adults are wiped out by freezing temperatures. Many male spiders during this time leave their normally protected shelters to venture about in search of female spiders. Yes, they may walk near you, but spiders have dreadfully poor eyesight and probably don't realize that they are near you. If found indoors, just scoop them up and usher them outdoors! Use a broom to direct the spider toward a doorway, or invert a large jar over it and slide a piece of paper under the mouth of the jar to trap the spider within and then release it outside.

All spiders are generalist predators. This benefits the IPM practitioner in that they provide important biological control. Research on the forest floor has shown that 78% of all the pest insects preyed upon

were consumed by spiders. Other research has determined that spiders can reduce pest damage in garden situations by 60% to 80%. Research on biological control of the azalea lacebug has also shown that the dominant predators of immature lacebugs are spiders. Therefore, it is to our benefit to safe-guard spiders as much as possible to benefit from this “free” pest control.

Spiders are grouped by entomologists according to how they catch their prey -- either through webs or by hunting. The diet of web weaving spiders is primarily insects while hunting spiders feed on both insects and other spiders. Both types are common outdoors and both types should be encouraged. A study in a California vineyard showed 8 types of spiders, representing 6 spider species, on the one site.

Accordingly, a diversity of spiders is desirable in the landscape, as different spider species have different foraging schemes (hunting on the ground vs. on foliage, for example) and feed at different times of day. Most spiders feed on insects smaller in size than they are, consuming any life stage of their insect prey (eggs to adults). They also kill more insects than they actually eat. They themselves are preyed upon by mantids and lizards.

Research has additionally found that spiders also influence pest populations in ways other than direct consumption. The presence of spiders can actually cause other insects to forage elsewhere, to stop feeding, and even to drop off plants completely. From the perspective of good biological control, spiders become active quite early in the growing season, before other beneficial insects (e.g., parasitoids) build up to noteworthy levels, and stay at the site until late in the season.

Encouraging spiders in the landscape is relatively simple. The best way to maintain plentiful spiders in the landscape is not to use pesticides. Spiders are very sensitive to pesticide sprays, particularly to pyrethroids. Therefore, if pesticides are necessary, only spot treat plants. Spot treatment is an IPM technique that maintains beneficial insects by only treating plants that have damaging levels of pests. When only plants are treated where the pest problem is severe, beneficials survive on untreated plants. Another way to encourage spiders is to apply and maintain mulch around landscape plants. Mulch provides a hiding place for spiders, buffers temperature extremes, and supports an alternative food source of detritus feeders to sustain them during times of limited pest prey.

Ref: *Common Sense Pest Control Quarterly*. XVI: 1 Winter 2000, *P.E.S.T Newsletter* 8:16. Oct. '00.

Reprinted from *Landscape IPM Notes*, November-December 2000.

*Deborah Smith-Fiola*  
*Rutgers Cooperative Extension*

---

## Questions from You

*Q. On a couple of occasions I have noticed some twisting or cupping of leaves on trees and shrubs following applications of a broadleaf herbicide to turf areas. Could these products be responsible for that injury?*

*A. Spray drift is commonly associated with this type of injury. Another reason may be the use of compost or mulch composed of herbicide treated plant material. However, these are not always the reasons and*

we need to further examine the situation. Dicamba is a common component in many of the broadleaf weed control products used in turf. This herbicide is soluble, soil active and can be responsible for this type of injury. Products containing dicamba **should not** be routinely applied over the roots of trees and shrubs. Precautionary statements such as “do not spray roots of ornamentals and trees” and “be particularly careful within the dripline of trees and other ornamentals species” are common on the label for these broadleaf weed control products.

*Q. There is a new turf herbicide on the market called Drive. How can Drive be worked into weed management programs? What weeds will it control?*

A. Drive\* contains the active ingredient quinclorac. This product is different than other weed control products labeled for use in turf. First, Drive\* provides postemergence control of both annual grasses and broadleaf weeds. Weeds controlled include crabgrass (small and large), barnyardgrass, yellow foxtail, black medic, dandelion, clover, and speedwells (common, slender and thymeleaf). Goosegrass is not controlled by Drive\*. Secondly, Drive\* has less restrictions for seeding or overseeding of cool-season turfgrass species compared to other herbicides. Some precautions: Drive\* may injure fine fescue and clippings from treated turf should not be used as mulch in gardens or ornamental beds. As with all pesticide applications, always consult the product label for information on your specific use situation.

*Q. Why does red sorrel (Rumex acetosella) seem to have two different color flowers? Are these different species?*

A. Red sorrel is dioecious ("two houses"). This means that male and female flowers are produced on separate plants. The male flowers are yellowish green and female flowers are reddish brown. The species propagates by rhizomes and distinct clonal patches of each sex are often visible. Other examples of dioecism include holly and ginkgo.

*Randall G. Probstak  
UMass Extension Educator - Landscape, Nursery and Urban Forestry*

---

Disclaimer: Where trade names (\*) are used for identification, no product endorsement is implied nor is discrimination intended against similar materials. The authors have assembled the most reliable information available at time of printing. Due to constantly changing laws and regulations, UMass Extension can assume no liability for recommendations.

---

### **Urban Forestry Diagnostic Lab Report**

*Particularly interesting examples of diseases and abiotic disorders received at the diagnostic lab for  
the period  
June 4 - June 15, 2001*

**Arborvitae** - transplanted 2 years ago to site along a road; no disease or insect feeding damage found/a number of environmental factors considered: first year transplanted (1999) was a drought year/winter drying after dry fall 2000 with persistent, reflective snow cover causing additional foliage moisture

loss/deicing salt injury.

**Japanese yew** - last year one 40 y/o shrub died and this year 2 more on either side died; last spring the downspout broke above affected plants/no disease/roots smothered in saturated, clay soil.

**Witch hazel** - scattered leaf blotches, many near base of leaf, also blighting of entire new shoots; Phyllosticta leaf spot.

**Cupressus 'Blue Ice'** - shoot tips of foliage turning brown on nursery stock received from west coast; Kabatina shoot blight.

**Beech** - Large mature tree with scattered branch dieback; drought stress/Botryosphaeria canker.

**Balsam fir** - entire tree with faded green-brown needles growing on sunny, irrigated, well-drained site for 5 years; decline from heat + drought stress/poor root establishment on an unsuitable site.

**Rosebay rhododendron** - most of 6 y/o plant with drooping, off-color leaves and no flowers this year, growing on sunny, sandy, irrigated site; virtually no root growth out of clay-loam soil root ball/drought +heat stress/high maintenance site for rosebay.

---

## **Annual Connecticut Nursery and Landscape Research Field Tour July 24, 2001**

The Connecticut Agricultural Experiment Station has scheduled its annual Nursery and Landscape Research Tour on Tuesday, July 24 at the Valley Laboratory in Windsor, CT. Registration starts at 8:30 am and the program runs from 9:00 am to 1:00 pm, rain or shine. The program includes a tour of research plots pertinent to the nursery and landscape industry; displays of Connecticut weeds and other pests; and short talks about important pests or problems, current pest updates, and pesticide safety. Recertification credits for private applicator and supervisory pesticide licenses will be available.

The Valley Laboratory is at 153 Cook Hill Rd., Windsor, CT. From north or south, take I-91 to exit 37 (CT Rt. 305, Bloomfield Ave). Travel east on Bloomfield Ave. about 1/4 mile. Take the first right onto Cook Hill Rd. The Valley Laboratory is about 100 yards on the right. For more information, contact Tom Rathier at (860) 683-4977 or [tomrath@caes.state.ct.us](mailto:tomrath@caes.state.ct.us)

---

HORT NOTES is a horticultural newsletter published bi-weekly from March through October by UMASS Extension. Subscriptions are \$15.00 (18 issues) per year. Make check or money order payable to *University of Massachusetts*, and mail it to *HORT NOTES*, French Hall, 230 Stockbridge Rd., UMass, Amherst, MA 01003-9316. When writing to request a change of address or to renew a subscription, please include the mailing label.

Kathleen M. Carroll, UMass Extension Educator  
Landscape, Nursery and Urban Forestry Program Coordinator