

INSECTS

Brian Kunkel Ornamental IPM Specialist

FLUCTUATTING TEMPERATURES this spring can influence when we see some of our more injurious pests. For example, early in March we had a number of days in the 70s; however, ambrosia beetle emergence still has not occurred in any large numbers due to cool temperatures that quickly followed those warm days. Eastern tent caterpillars are one of earliest insects, and their activity has been observed in Sussex county; thus they are discussed in the following paragraphs.

EASTERN TENT CATERPILLAR is one of our first insect pests and typically emerge from egg masses during 13 – 160 [59 peak] GDD₅₀. The neonate (first instar) caterpillars migrate to forks in tree branches, form their tents, and lay down silken trails to nearby emerging foliage. They have a black background with tancolored hairs, irregular blue markings, a white stripe down the back with yellowish-tan stripes on either side. Wild cherry leaves are preferred food, but they also readily eat crabapple, apple, plum, peach, and occasionally birch or ash leaves. Female moths emerge and mate during the summer, and they lay eggs in small gray foam-like masses onto small branches or twigs.

A number of natural enemies such as assassin bugs, parasitoids, and birds help keep this insect under control. A naturally occurring virus also helps reduce their populations. Tearing the tent to expose larvae to birds and insect predators or parasitoids provides some control. Pruning out or scratching off egg masses is an effective cultural method to control eastern tent caterpillar for the next year. Some compounds used to control eastern tent caterpillar include: insecticidal soap, *B. thuringiensis* (Dipel), spinosad (Conserve), chlorantraniliprole (Acelepryn), or pyrethroid products such as bifenthrin. Applications when the larvae are small increases efficacy and applications should cover both the foliage and the tent.

DISEASES

Nancy Gregory Plant Diagnostician

GYMNOSPORANGIUM RUSTS have been more common in the landscape, with the telial stage of the fungus showing on juniper hosts and the aecial stage showing on pomaceous hosts such as apple and pear. Telial structures are visible now on juniper. Management includes breaking the disease cycle by pruning out affected portions of juniper host plants where rust fungi overwinter. Recent cold weather has slowed the development of these rust fruiting structures, so there is still time to prune. Teliospores germinate to form basidiospores, which are very small and easily

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Issue 3 What's Hot!

Monilina blight can be very problematic on late flowering Kwanzan cherry trees and flowering quince. The fungus survives the winter in twigs and buds. Labeled fungicides can be applied at pink bud or right after bloom to manage twig infections. Do not treat with fungicide when bees are out.

Tree Identification Walk originally schedule for Thursday, April 7 has been rescheduled for April 19 from 4:30 - 6 PM due to predicted bad weather. This walk is taking place on the Delaware State University campus in Dover. Meet at the Washington Building near the Herbarium. Cost is \$15. This course is worth 1 pesticide recertification credit, 2 ISA credits and 1 CNP credit. Preregister by contacting Jan Unflat (302) 730-4000 or jmunflat@udel.edu<mailto:jmunflat@udel. edu.



Eastern tent caterpillar tent in branch crotch. Photo credit: Tracy Wootten

more

on pests & practices covered in this newsletter, call your County Extension Office

Helpful numbers to know:	
Garden Line	831-8862
(for home gardeners only)	
New Castle County Extension	831-2506
Kent County Extension	730-4000
Sussex County Extension	856-7303
View more pictures at http://si ornamentals/	tes.udel.edu/

COOPERATIVE EXTENSION

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Diseases (Continued)

carried on winds. Spores are carried to the alternate hosts in the spring where they cause leaf and fruit spots. Cedar apple rust (*G. juniper-virginiana*) galls have been observed on Eastern red cedar this season. Cedar quince rust (G. clavipes) is observed as flat oval cankers on juniper twigs (see picture on J. chinensis), with the spore production appearing as orange powder or ooze in the cracks in twigs. Cedar quince rust can be very damaging on apple and hawthorn later in the season. Cedar hawthorn rust (*G. globosum*) occurs on junipers as small galls. Japanese apple rust (G. yamadae) forms small gelatinous galls on J. chinensis, and causes leaf spots on apple and crabapple. A new Gymnosporangium rust in the Mid-Atlantic is pear trellis rust, caused by *G. sabinae*. Pear trellis rust is found on leaves and fruit of pear, including callery pear, with small twig cankers on juniper. Protectant fungicide sprays can help to control rusts on apple, crabapple, quince, and hawthorn if applied during the infection period, through early May. Timing of labeled products is important. Do not plant apple, crabapple, hawthorn, and pear near juniper hosts.



Cedar quince rust on juniper, flat cankers. Photo credit: Nancy Gregory





Eastern tent caterpillar closeup. Photo credit: Lacy Hyche, Auburn University, bugwood.org



Eastern tent caterpillar tent ripped open to expose young caterpillars. Photo credit: Tracy Wootten



Japanese apple rust on juniper, small galls. Photo credit: Nancy Gregory

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