

INSECTS

Brian Kunkel Ornamental IPM Specialist

WHITE GRUBS hatch from eggs from late June through early September depending on how early in the summer female scarabs laid the eggs. They feed on grass roots or in flower beds now, so this is a good time to scout areas with previous problems. There are many scarabs in our area that contribute to the white grub complex. Scout areas with historical records of previous grub populations first and apply insecticides as necessary. Japanese beetles were locally abundant in some areas of Delaware, and other scarabs had populations like past years. Other scarabs that contribute to the white grub complex include masked chafers, green June Beetles, oriental beetles, and *Phyllophaga* spp.

Damage from white grub feeding often starts about mid-August to early September. Areas of turf with high grub populations may appear greasy or drought-stricken due to root feeding. When the lawn feels spongy underfoot, investigate for white grubs. Also scout sunny locations, irrigated turf appearing drought-stressed, turf with grub history, and locations with high adult activity. Use a knife, shovel, or standard golf cup-cutter to sample a square foot of turf. White grubs are found at the soil-thatch interface and 8 – 10 grubs or more per square foot should be treated to reduce grub damage. Preventative products are usually applied from mid-June to mid-July, thus we are a little later than usual. Soil moisture is needed for egg survival and hatch, so irrigated turf is more likely to show damage.

White grubs are attacked by predators, parasitoids, entomopathogenic nematodes, and other entomopathogens throughout the year. Imidacloprid and other neonicotinoids, usually preventative products, are also used as curative with some success if applied before mid-September. Chlorantraniliprole is a new product that may be applied as early as May. Preventative treatments target scarab larvae when they are smallest and easiest to control. Traditional rescue products include Sevin or one of the many pyrethroids.

DISEASES

Nancy Gregory Plant Diagnostician Jen Rushton, Intern

JUNIPER TWIG BLIGHT has been seen in addition to winter injury in juniper plantings this season. Both Phomopsis and Kabatina blight diseases are caused by fungi, but the fungi implicated sporulate at different times and have different management. Removal of old dead twigs and branches is very important for the control of both diseases. Remove infected dead shoots early in the (Continued)

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What's Hot!

Green June beetles are flying. No treatments needed.

Fall webworm tents are on the terminal ends of branches. Treatments are as simple as tearing open or pruning out.

Tuliptree/magnolia scale females are swelling. Drenches of imidacloprid (if required) should be now and dinotefuran now or in next week or so would be effective. Treatments targeting crawlers will be in a few weeks.

During hot and dry weather, water turf only once or twice a week deeply, watering in the morning hours so foliage can dry.



White grubs. Photo credit: UGA Entomology, Bugwood.org

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://ext edu/ornamentals/	ension.udel.

COOPERATIVE EXTENSION

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Diseases (Continued)

spring before new growth begins to reduce new infections. Prune out the worst affected branches and discard off the property. Control Phomopsis blight with registered fungicides such as chlorothalonil or mancozeb, or the more systemic myclobutanil or propiconizole. Make applications before new growth starts in the spring and re-treat every 10 to 14 days as long as new growth is produced. For Kabatina blight, apply chlorothalonil or mancozeb in the fall (mid-September, repeat in 10 -14 days), as *Kabatina* produces its spores in the fall. Spray again next spring, as it will take a year or two to get it under control. The best option is to select resistant juniper cultivars. Few cultivars are resistant to both diseases, but those include Juniperus chinensis 'Phitzeriana aurea' and J. chinensis var. Sargentii 'Glauca'. The fungus Pestalotiopsis is often seen on dead twigs of juniper, but is an opportunistic weak pathogen, usually preceded by environmental injury. No treatment is recommended for Pestalotiopsis blight.

Editor: Susan Barton



Kabatina B;ight on juniper. Photo credit: Penn State PPEM

Swarthmore College (Delaware County, PA) = 1782 ('17 =1788) rischer Greennouse (New Castle County) = 1759 ('17 =1798) Fischer Greenhouse Research & Educ. Center, Georgetown (Sussex County) = 1884 ('17 = 2034) AS OF July 17, 2018

Extension Horticulturist