TSU NURSERY NEWS TO USE

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The LEAFFOOTED BUG is a medium to large insect that feeds on fruits, nuts and nursery ornamentals. They have piercing-sucking mouthparts and overwinter as adults. When the weather warms, adults disperse to find food. They are long-lived and can lay eggs over an extended period, so the populations can consist of all life stages by late June. In the spring, they feed on thistle and other weeds. As fruits ripen, they migrate into nursery blocks. Think IPM, which includes removing overwintering sites and weed hosts, using row covers, increasing natural enemies and the use of insecticides. The most effective insecticides are broad-spectrum, pyrethroid-based insecticides; however, they are toxic to bees. Observe DTH on label.

JAPANESE BEETLE REMINDER!

The time is quickly approaching to calibrate tractors for Japanese beetle! Please make sure to complete this task by July 31, 2020. For more information, contact the Tennessee Department of Agriculture. Treat soil around plants to be shipped to beetle-free areas after calibration. Marathon, Discus and Flagship are all approved for use.

CICADA MAPPING.

Steve Powell, entomologist for TDA, has reported "off schedule" Brood XIX periodical Cicadas emergence, nearly four years early, in middle Tennessee. Dr. Gene Kritsky, with Mount St. Joseph University states "this is a wild cicada year." In addition to the expected Brood IX, other areas, including Chicago, are seeing early XIX, X and XIII emerging. A map is available showing three of the four broods emerging. You can verify the brood by looking at the underside of the large periodical cicada species. If the underside of the abdomen is all yellow it is a 13-year cicada Brood XIX, however, it is a 17-year cicada Brood X if the underside of the abdomen has black and yellow bands. Cicada Safari, a free app, uses the metadata to map the emergences and is available to download for android at https://play.google.com/store/apps/details?id=edu.msj.cicadaSafari and iOS/Apple at https://itunes.apple.com/us/app/cicada-safari/id1446471492?mt=8.

Cydalima perspectalis, BOX TREE MOTH (BTM) TRAP UPDATE!

Box Tree Moth traps are up in 30 locations across middle Tennessee. BTM is not currently in the United States, however, it is expected that it will spread naturally into the USA. Thank you to all the participating boxwood growers! Monitoring across Tennessee will assist in control efforts. If you see any related symptoms or signs on boxwood, please contact adismuk1@tnstate.edu or kaddesso@tnstate.edu. More information can be found at http://tcimag.tcia.org/publication/?m=54984&i=578082&view=articleBrowser&article_id=3346000.

WEED OF THE MONTH: Yellow Woodsorrel (*Oxalis stricta*)

Yellow woodsorrel is a native perennial plant that has become a persistent weed in container-grown nursery stock production and propagation. Plants have trifoliate leaves that resemble clover but are not related. Yellow woodsorrel plants can persist year round in protected areas (e.g. overwintering houses) and spread by rhizomes (underground stems) and seeds. Plants have yellow flowers and a single plant can produce up to 5000 seeds in one year. Seeds can be propelled several feet from the plant due to explosive dehiscence which increases dispersal throughout the nursery. Manually pulling yellow woodsorrel weeds may be ineffective unless all roots and rhizomes are removed from the nursery container, which is virtually impossible for larger weeds.

Good sanitation practices are key to preventing yellow woodsorrel infestations and include weeding liners prior to transplant, removing small weeds prior to flowering, thoroughly washing re-used containers, and properly storing pine bark and other potting substrates to prevent infestation. Pre-emergent herbicides can also be used to prevent yellow woodsorrel seed germination and effective products contain dimethenamid-P, dithiopyr, flumioxazin, indaziflam, isoxaben, oryzalin, oxadiazon, pendimethalin, or prodiamine. Contact Dr. Anthony Witcher at awitcher@tnstate.edu for more information on nursery weed control practices.

OAK PHYLLOXERA (*Phylloxera quercus*).

A very small (0.01 - 0.02”), aphid-like insect that lack cornicles, can cause damage to the buds and young developing leaves on the terminals and branch ends of white and red oak, usually found in clusters. Buds and young developing leaves on the terminals and branch ends of red and white oak are attacked, causing bright yellow spots and leaf distortion. Scout for phylloxera and the damage they cause NOW! Dormant oil sprays in February-March will help prevent infestations. Treat foliage with Carbaryl, Dursban, Tempo, Decathlon, horticultural oil, Merit or Discus when nymphs/adults are visible. Most products are contact and require thorough coverage. For taller trees, systemics are easier to apply. According to Dr. Karla Addesso, damage has been observed in past years in July, so scouting and treatment for growers who have had problems previously should start in June.

Early detection will allow time to decide which/if management options will be useful. There are several predators recorded as feeding on oak phylloxera, however, significant damage and defoliation can occur and ornamentals require chemical control. For more information, please contact me at adismuk1@tnstate.edu.

POTENTIAL BOXWOOD LEAFMINER TRIAL.

If you have had issues with the efficacy of imidacloprid for boxwood leafminer and are interested in participating in a new study on boxwood leafminer control, please contact Amy Dismukes at adismuk1@tnstate.edu or Dr. Karla Addesso at kaddesso@tnstate.edu.

Please be patient with us regarding the plastic recycling program at the TSU Nursery Research Center. One of the two rollers was lost in a fire, however, and a replacement is expected this fall.

For more information or to reserve a roller, please contact Josh Reed at 931-743-2363.

TENNESSEE STATE UNIVERSITY
College of Agriculture

TENNESSEE STATE UNIVERSITY
OTIS L. FLOYD NURSERY RESEARCH CENTER

472 Cadillac Lane
McMinnville, TN 37110
931-668-3023
http://www.tnstate.edu/agriculture/nrc/

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