

The Feeder Tube by



AUGUST 2014

A NEW THREAT TO OAKS IN SOUTHERN CALIFORNIA

The goldspotted oak borer (GSOB), *Agrilus auroguttatus* (Coleoptera: Buprestidae), is a flatheaded borer new to California that poses a significant threat to oak trees. The pest is native to southeastern Arizona, although a related species occurs in southern Mexico and northern Guatemala. GSOB was first collected and identified in California in 2004 in San Diego County but was not linked to extensive oak mortality until 2008. As of 2010, GSOB has killed an estimated 21,500 trees covering 1,893 square miles in San Diego County in forests, parks, and residential landscapes.



GSOB larvae feed beneath the bark of certain oaks near the interface of the phloem and xylem, the nutrient and water conducting tissues of plants. The larvae damage both of these tissues as well as the cambium, a unicellular layer between the phloem and xylem that is responsible for the radial

growth of the tree. Trees die after several years of injury inflicted by multiple generations of the beetle, causing significant economic, ecological, cultural, and aesthetic losses to the region. GSOB poses a major threat to susceptible oak species throughout California and southern Oregon. Currently there are no effective tools for protecting trees once infestation occurs.

Under a collaborative program, agencies and organizations are working together to determine the distribution, impact and possible prevention methods of tree mortality caused by Goldspotted Oak Borer (GSOB). Research includes understanding the lifecycle of GSOB, local infestation levels, tree health and susceptibility and the current distribution of oaks affected in San Diego. Local citizen awareness can help determine the locations of infestations in the county. If you suspect a GSOB infestation in local oak trees, please answer as many of the questions below as possible. <http://ucanr.edu/sites/gsobinfo/>

Calendar of Events:

ISA
Milwaukee, WI
August 2 - 6, 2014
Booth #709

GIE + Expo
Louisville, KY
October 22 - 24, 2014
Booth #3004

Landscape Expo
Long Beach, CA
October 29 - 30, 2014
Booth #457

Tree Care Industry Expo
Hartford, CT
November 13 - 15, 2014
Booth #931



Abacide® 2 Label Amendment

The new Abacide® 2 Gen II and Hp labels provide a wider application for insects that feed within phloem tissues, such as Clear-wing borers and many conifer bark beetles. Rates now range from 1-20 ml per inch diameter (insect dependent) and provide from 1 to 2 years control of these pests.

Early trials with EAB are showing promise but the untreated control trees must show damage before applying for a label amendment to add this significant pest to the existing label.

Notes from the Field - Midwest / Northeast /South

Throughout much of the Midwest and the Northeast, during the 2013 year we experienced a later than normal spring followed by a "normal" summer and fall in terms of the weather.

The **Emerald Ash Borer** continues to spread in all directions. During the past year the EAB has been positively identified as far west as Colorado and Kansas. It has been found in Tennessee, North Carolina and into Georgia. The EAB has also been positively identified in Massachusetts and New Hampshire. Some EAB researchers are of the opinion that not all of these newly discovered EAB populations have come from the original introduction in Michigan. They believe that some EAB populations are the result of new introductions from Asia. Mauget's product, Imicide® provides an excellent preventative / early curative control option. Mauget's Inject-a-Cide B® offers an excellent curative option for trees that are infested with the EAB.

Bacterial Leaf Scorch continues to be a problem throughout parts of the Midwest and Northeast. BLS symptoms appear in mid-late June and increase in severity throughout the summer. Scorch appears as an irregular, scalloped browning along the leaf margin and may be bordered by a yellow halo. As the browning spreads, leaves may curl and drop. Symptoms recur each year and spread throughout the tree's crown resulting in branch dieback, crown decline and eventually death. Mycoject® Ultra has done an excellent job of suppressing Bacterial Leaf Scorch. New cases brought to Arborist's attention may be treated when symptoms first appear. Affected trees should be retreated each fall for symptom remission.

The **Spiraling White Fly** is attacking many types of plants in south Florida. This White-fly can be found feeding on the underside of leaves creating a sticky, black sooty mold. An injection of Imicide® has been providing a very effective way to control the Spiraling White Fly.

Tree Care professionals are discovering the benefits of using the **Mauget Liquid Loadable** product line. Applicators who prefer using a reloadable tree injection device find that the Mauget Liquid Loadable products work very well. The ready to use, proven chemistry presents an effective, efficient and economical way to treat client's trees for a variety of insect, disease or fertility problems.



R&D Updates

Hp Injection System: Mauget is testing 2 new OEM Hp injection systems. One system is based on a modified livestock-syringe that is adapted to tree injection. The other is a manifold system which will enable the applicator to apply chemistry to multiple injection sites at once. Both systems are based on proven technology. The Mauget systems will share the same bottles and bottle top. This will enable the applicator to convert from one to the other type without the need to purchase 2 different complete systems. The bottle top fixture will incorporate rigid tubing which can puncture a foil seal membrane giving both systems the ability to be 100% closed. (That is for chemistry ordered in the Mauget Hp pressure bottles.) Currently field testing has been going on with systems targeted for availability this coming fall.

Mycoject® Ultra Refrigeration Extends Shelf Life: Currently Mycoject® Ultra is required to have a 6 month expiration date. Mauget has been investigating various ways to extend the shelf life of this product. We have been conducting in house studies of the effects of refrigeration on the shelf life stability of Mycoject® Ultra. Our goal was to get a full year of stability. At 12 months the material that has been refrigerated show significant stability over the same material stored at room temperature (according to non GLP analysis). Next step is to approach EPA for label amendment.

Vigor 53® Label Update: The guaranteed analysis has been updated due to a number of states not recognizing the form of phosphorus (P₂O₅) found in Vigor 53®. This has been the case with other manufacturers of phosphorus (phosphoric acid) fertilizers as well. Mauget has updated the label for Vigor 53® to reflect states rulings by eliminating phosphorus from its guaranteed analysis on its label. The state of Indiana will have its own version of this label as well reflecting wording unique to that state. Please visit www.mauget.com for label updates.

Mauget Liter Chemistry

The new line of bulk chemistry which includes Imicide® Hp, Arborfos® Hp, and Mycoject® Ultra HP continues to gain in popularity amongst applicators doing large jobs. Comparing the Gen II price per diameter inch, the Hp liter products are more economical but most importantly they reduce time on-site and increase profits from labor savings. Reloadable tree injection devices include the ChemJet™, SmartShot™ Syringe, QuikJet™ Syringe, the Tree IV™, and the Air Hydraulic™.

GEORGE HARRISON MEMORIAL TREE KILLED BY BEETLES

LOS ANGELES (AP) —

A tree planted in Los Angeles to honor former Beatle George Harrison has been killed — by beetles. Councilman Tom LaBonge says the pine grew to more than 12 feet tall before succumbing to a bark beetle infestation. The tree was removed last month. LaBonge says it will be replanted in the fall.

After Harrison's 2001 death in Los Angeles, the pine was planted near Griffith Observatory. A small plaque at the base commemorates the guitarist and songwriter, who had a deep appreciation of gardening.

LaBonge says several trees at Griffith Park have been killed by the beetles.



Surviving the Drought

Drought conditions can always present a serious challenge when using any systemic plant health care product. This can be especially true when applying time sensitive treatments. A tree must be actively transpiring for these treatments to be translocated throughout the entire tree. In order for a tree to be actively transpiring it must have sufficient soil moisture. Remember to have your customer schedule 1 or 2 watering events prior to using any tree trunk injection products. In those areas with limited irrigation or water restrictions, consider offering supplemental watering that has a soil wetting agent as part of a PHC program. These often misunderstood watering aides lessen the surface tension from overly dry soils and mulch so valuable irrigation water penetrates more deeply in the soil profile. They are formulated to provide 30, 60, and 90 residual effects but the 30 day products have the best price point and will allow the applicator to provide a tiered level of service, i.e. monthly throughout the summer or as needed. Call your chemical distributor for the products available in your area.



Mycoject Ultra Applications for Fire Blight

Applicators should be reminded when making application in early spring for Fire Blight in "Drought Areas" with Mycoject® Ultra, to make sure that the trees are well irrigated.

We suggest the tree be watered twice before the application, the tree needs good upward movement during bloom for an effective applications.

This will help insure the upward movement of the material throughout the tree. If the trees are not well irrigated, your customers may see some infection.



Recovering from Winter

2014 got off to a very cold start throughout much of the Northeast and Midwest. Most of this area experienced near record breaking low temperatures. Much of this area also received heavy snowfall and strong winds.



This type of extreme winter weather conditions caused significant damage to trees and shrubs. Some of the winter related problems include:

Winter burn in evergreens. This includes conifers along with broadleaf evergreens such as boxwood, holly, rhododendron and others. The symptoms of winter burn are scorched leaf tips or scorch on the outer margins of leaves. Winter burn can also cause complete browning of leaves needles and death of terminal buds and branches. Winter burn is caused primarily by desiccation. This happens when roots are unable to replenish the water lost through transpiration. Desiccation generally occurs when plants are either exposed to drying winds or growing in warm sunny areas. Winter burn is sometimes misdiagnosed as either a disease or an insect related problem.

Freeze or Frost Injury presented a problem primarily to flowering trees and shrubs. This type of damage actually occurred during either the autumn or the spring. In the autumn, freeze or frost injury usually occurs during the first cold fall weather following a warm fall. This weather prevents the tree's acclimation to cold weather. In the spring, freeze and frost injury may be caused during cold weather following warm weather that caused the tree to deacclimate to cold weather. The symptoms of winter freezing can include blackened shoot and leaf tissue, dieback, browning of needles, sunscald and bark splitting on branches or the trunk. Serious freeze injury can damage the sapwood or cambium resulting in cankers, dieback, wilting and death during the next growing season. Pathogens like *Botryosphaeria* canker, *Cytospora* canker and *Phomopsis* tip blight may invade the damaged tissue.

Bark splitting / sunscald developed on the trunk or limbs of trees exposed to the sun. This generally develops on the southwest side of the tree. Sunscald is most prevalent on young, thin-barked trees such as maple, crab apple, flowering fruit trees and mountain ash. Sunscald and bark splitting most often occurs when water in the inner bark and in the wood expand and contract with fluctuating temperatures. Although bark splitting and sun scald are not fatal they may allow the entry of insects or disease.

Most of these winter weather related tree problems did not become visually apparent until spring or early summer, after the trees had emerged from winter dormancy and begun growing. If not managed properly, this damage may become a more serious tree health problem if the affected trees develop an additional disease or insect infestation. It is always a good idea to actively look for the signs of winter damage on client's trees in the spring and early summer. Trees that display signs of winter damage should be monitored and if needed, treated to avoid secondary problems.



Rare redwood tree blocking planned railway tracks in Northern California to be replanted

COTATI, Calif. – A rare redwood tree in a small Northern California city will be replanted instead of being sawed down to make way for planned railway tracks.

The San Francisco Chronicle reported Wednesday that the 52-foot-tall chimeric coast redwood in Cotati will be dug up next month.

It will be moved about 450 feet near the east platform at Cotati station, where future riders of Sonoma-Marín Area Rail Transit will have a view of the tree's gold, white and green hues.

Arborists say the 60-year-old tree is one of only a handful of coast redwoods that have both albino and normal foliage on the same branches.

A proposal by the railroad to chop it down infuriated residents and led to a campaign to save the redwood.

Advice From A Tree

- Stand Tall And Proud
- Go Out On A Limb
- Remember Your Roots
- Drink Plenty of Water
- Be Content with Your Natural Beauty
- Enjoy the View

Donna Ruffin

MARKETING/ PRODUCTION REPORT JULY 2014

Our HP product line continues to be in record demand. Abacide® 2 has an expanded label with improved residual protection (up to two plus years) using higher dosage levels when used for various bark beetle applications as determined by Don Grossman, Texas Forest Service. Inject-A-Cide® (MSR) has been discontinued and is replaced by Abacide® 2.

Production maintained its goal of meeting demand throughout the first five months of the year. We experienced a shortage of compression devices as our supplier was in the process of changing vendors. We now have a stable supply and all backorders are being filled.

ALB: Once again we were awarded an opportunity to support this critical USDA Aphis program with the contractor. Mauget is proud to report that Imicide® And Imicide® HP have been selected to protect well over a million trees from this devastating invasive insect.

THE INTERNET & SOCIAL MEDIA NETWORKS:

Be sure to check our presence on Facebook, Twitter and our LCO website. we are very pleased with the acceptance we are seeing from our followers through this medium. More emphasis and resources will be devoted to developing our social media presence.

TREE INJECTION SUMMIT: Mauget attended and co-sponsored the sold out western summit in May hosted by TCIA & Bob Rouse. All the major providers of trunk injection technology were represented and such credible presenters from the tree care industry provided a high level of scientific data and history of the technology.

INDUSTRY LOSSES: We lost a dear friend in 2013, **Jeff Farley** of Professional Tree in Maitland Florida. He is survived by his wife Lina who continues to carry on the business. He is sorely missed.

The best time to
plant a tree is
20 years ago.
The second
best time is
now.

-African Proverb

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Please contact Mary Peters—
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(mary@mauget.com) with
suggestions or topics you would
like to see in future issues

Ask

Ann: *By Ann Hope*



Q. How do I get more Tree Injection Business?

A. Well, there are a couple different ways. First, you must be Mauget certified - then you can go to our web site www.mauget.com and apply to the database web site. This will allow others looking for a Mauget applicator to find you in the database.

Another way would be, when making an application, let's say in a residential neighborhood you can put flyers around the neighborhood with your information.

B. Ann Hope is Mauget's Technical Support Representative for Southern California. Please email any questions to Ann at: