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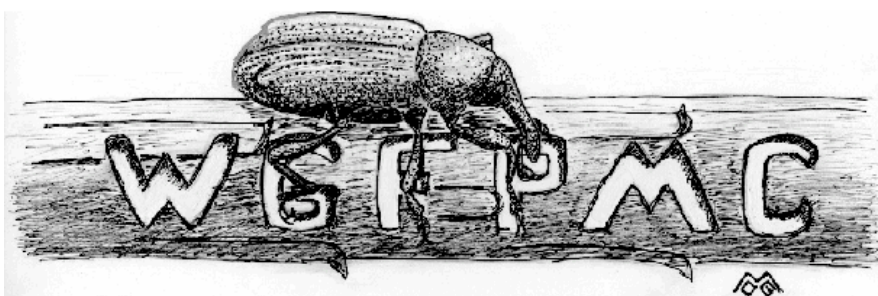
**Quarterly Newsletter
on Western Gulf
Forest Pest Management
Issues**

PEST is a quarterly newsletter that provides up-to-date information on existing forest pest problems, exotic pests, new pest management technology, and current pesticide registrations in pine seed orchards and plantations. The newsletter focuses on, but is not limited to, issues occurring in the Western Gulf Region (including, Arkansas, Louisiana, Mississippi, Oklahoma, and Texas).

Announcement:

Entomology Seminar - All WGFP MC executive and contact representatives, industry, and TFS foresters are invited to attend the fall session of the East Texas Forest Entomology Seminar scheduled for November 8 & 9, 2001. The meeting will begin at 1:00 PM on Thursday at Kurth Lake Lodge, north of Lufkin, and continue until noon on Friday at the Arthur Temple College of Forestry at SFASU in Nacogdoches. Registration is \$20, which includes an evening meal. For additional information and/or an agenda, contact Ron Billings at 936/639-8170 or rbillings@tfs.tamu.edu.

Western Gulf Forest Pest Management Cooperative



**Texas Forest Service, Forest Pest Management,
P.O. Box 310, Lufkin, Texas 75902-0310**

Status of Sulfluramid (Volcano®) Registration

In 1999, the Texas Department of Agriculture approved a 24C (Special Local Need) registration for Volcano® Leafcutter Ant Bait. A similar registration was approved in Louisiana in 2000. The bait's use was limited to pine forest sites in both states. Since that time, the bait has proven remarkable effective (100%) in completely halting ant activity.

Sulfluramid, the active ingredient in Volcano®, is in the same class of chemicals as the perfluorooctyl sulfonates (e.g., Scotchgard) which 3M Company announced last year it would be phasing out of its product line (May 16, 2000). Sulfluramid is also used in bait stations for control of ants, roaches, termites, wasps and hornets in and around homes. In large part driven by the long half-life of these chemicals, the Environmental Protection Agency (EPA) has had concerns related to reproductive effects and to ecological effects from either the purposeful use or the inadvertent exposure to the environment of these products. In light of these concerns, EPA has negotiated a phase-out of pesticide products (including Volcano®) with the following companies: Griffin L.L.C., FMC Corporation, Chemisco, S.S. Johnson and Son, Inc., and Whitmire Micro-Gen Research Laboratories, Inc. The registrants associated with sulfluramid are interested in product stewardship ideals and therefore have agreed to either immediately voluntarily cancel some of their products or agree to a time line under which these products will be phased-out. Griffin L.L.C. has agreed to discontinue production of technical sulfluramid. In turn, EPA has agreed to allow Griffin to utilize its remaining stock of sulfluramid. I have been informed by Jimmy Whatley, Griffin L.L.C., that Volcano® should remain available for the next 7 – 10 years.

Continued on Page 2

Volcano® (Continued from Page 1)

However, another provision of the EPA/Griffin agreement was that the use language would be changed from "Pine Forest Sites" to "Pine Reforestation Sites." Strict interpretation of this new language suggests to me that Volcano® only can be applied to leaf-cutting ant colonies located within the borders of land areas that are to be replanted with pine and not to ant colonies in stands surrounding the harvested tract. Ants in surrounding stands will often construct long foraging trails (300 feet) that frequently extend into replanted areas and cause extensive seedling mortality. There is a definite need to control not only those colonies occurring within the harvested area but also those colonies occurring in neighboring stands. I have submitted a letter to EPA, through Griffin L.L.C., asking that they strongly consider retaining the site use as "Pine Forests Sites." I will keep you informed as to the outcome of this request.

Given EPA's concerns about sulfluramid and the expected eventual phase-out of Volcano®, research has been continued to evaluate new alternative baits. One promising alternative and, one being promoted by EPA, is an Aventis product called Blitz®. The carrier is also citrus pulp (like Volcano®), but the active ingredient is fipronil. Results from preliminary field trials, conducted this past winter and so far this summer, indicate that Blitz® is equal in efficacy compared to Volcano® in halting ant activity. Blitz® is currently manufactured in Brazil. The potential for registration of Blitz® in the United States is under review. I will keep you informed as events unfold.

Don Grosman, WGFP MC Coordinator

Reference: Negotiated phase-out of sulfluramid and LPOS pesticides. Pesticide Notes Vol 21, No.8. Aug. 2001.

More Pesticide News

The Cancellation of Benomyl Raises Some Unexpected Health Concerns

(Source: *Pesticide & Tox. Chemical News*, 8-13-01 via Georgia Pest Management Newsletter, Sept. 2001)

A few months ago, DuPont announced the cancellation of its popular fungicide, benomyl. Their decision was driven by their business plan, not by any health risk.

Thiophanate-methyl (TPM) is expected to take a substantial part of the benomyl market. TPM is already registered for a wide variety of food and residential applications. TPM breaks down into carbendazim; TPM and carbendazim have a similar toxic endpoint. Additionally, carbendazim is registered for use as a paint preservative. Suddenly, EPA was faced with an unforeseen scenario in which potential exposures were much greater than anticipated.

TPM is classified as a 'likely carcinogen,' and carbendazim is a 'possible carcinogen.' Both chemicals can affect developing fetuses. These classifications do not mean that current or predicted exposures will result in human illness, but the EPA is taking a close look at the new scenario.

The Agency is seeking comments on their revised assessment of risks. If you use benomyl or TPM, you should take the time to comment. You can read the assessment and comment at

<http://www.epa.gov/pesticides/reregistration/tm/>

Continued on Page 3

Pesticide News (continued from Page 2)

Ronilan Cancellations

(Source: Federal Register, Aug. 22, 2001 via Pesticide Reports, Sept. 2001)

EPA has accepted BASF's request to cancel several uses of Ronilan fungicide. These use cancellations affect Ronilan's use on onions, ornamentals (except conifer seedlings), **conifer seedlings**, lettuce, and succulent beans. Sale of Ronilan is prohibited after October 15, 2001, for onions, ornamentals and **conifer seedlings** and after September 30, 2005, for succulent beans.

This cancellation also affects end users. Growers and applicators with Ronilan cannot use the fungicide on onions or ornamentals after December 15, 2001. Use on **conifers** is illegal after December 15, 2003, and after November 30, 2005, for use on succulent beans.

It is advised that growers and applicators double check their stock of Ronilan and ensure that they do not have any around when the above dates arrive.

Thiomethoxam Registrations

(Source: W. Hosid, FDACS PREC, 8/7/01 via Chemically Speaking, Aug. 2001).

Syngenta has received conditional registration of three thiamethoxam products as of August 7, 2001. Actara® is a foliar material for cucurbit, fruiting, tuberous and corm vegetables, tobacco, and pome fruits. Platinum® is a soil or in-furrow applied material for these same crops except pome fruit. Centric® is a foliar material for pests on cotton. **Editor's Note:** Systemic injection trials conducted by the WGFPMC have shown thiamethoxam to be effective in reducing damage by seed bugs in pine seed orchards

Resistance Management Essential with New Pesticides

(Source: Ornamental Outlook, July 2001 via Chemically Speaking, Aug, 2001)

Since developing a conventional pesticide is a long and expensive process, product managers as well as some labels specify how to use the materials in a manner that would discourage resistance. In ornamentals, for instance, spinosad, fenpyroximate, abamectin, bifenazate, and chlorfenapyr are all recently registered insecticide/miticides.

For spinosad (Conserve®), the current label stipulates applying no more than 10 times per year. The new label will limit that number to six, regardless of crop or pest. SePRO actively promotes the rotation of different chemical families with different modes of action with regard to their new miticide Akari® (fenpyroximate). Users of Avid® (abamectin) should limit the number of applications in a row before switching to another chemistry. Tank-mix as a secondary tactic, but do not replace alternations. The Floramite® (bifenazate) label requires rotation with two alternate chemistries and restricts to two applications per crop per year. Chlorfenapyr (Pylon®) should be used two to three times, and then switch to another chemistry. Ultra-low volume applications are good for adults, while high-volume applications are more efficacious on other stages.

The same rationale holds true for fungicides. Make sure to rotate the strobilurins (such as azoxystrobin and trifloxystrobin) with more commonly used fungicides such as copper (Phyton-27) or potassium bicarbonate (Kaligreen®).

Pest Spotlight: Southern Pine Sawyer

Over the past few years, you may have found yourself standing in the middle of a bark beetle infestation evaluating tree mortality caused by drought and *Ips* engraver beetles. You will likely have noticed that a strange sound was coming from some of the dead trees. What you heard were not the spirits of the dead trees, but the feeding activity of “sawyers” - larvae of the southern pine sawyer, *Monochamus titillator*.

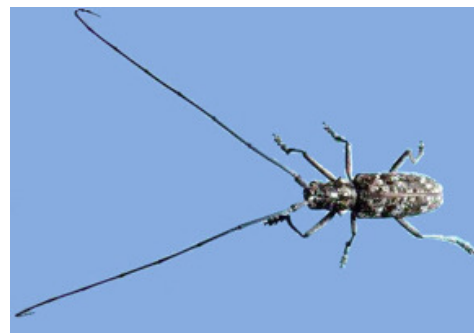
The genus *Monochamus* is represented by several important wood-boring species in the eastern forests of the United States, all of which breed in various conifers. All species are secondary pests – infesting freshly cut, felled, dying or recently dead trees and serve as one of the initiators of the natural decomposition process. The young larvae feed on the inner bark, cambium and outer sapwood, forming shallow excavations called surface galleries which they fill with coarse, fibrous borings and frass. As they grow older, they bore deep into the heartwood, and then turn around and bore back toward the surface, thereby forming a characteristic U-shaped tunnel. A pupal cell is formed at the outer end of the tunnel, from which the adult emerges by chewing a hole out through the remaining wood and bark. Full-grown larvae, frequently referred to as roundheaded borers, are legless and whitish yellow in color and often more than two inches long.



The grub of the southern pine sawyer, one of the roundheaded borers.

The adult southern pine sawyer is mottled gray and brown, and is from $\frac{3}{4}$ to $1\frac{1}{4}$ long. Males often have antennae 2 to 3 times as long as their body and a strong spine on either side of the thorax.

In the Piedmont area of the South, adult emergence reaches a peak in April and May. However, adult activity continues until late fall and probably to some extent through the winter. The adults are known vectors of the pine wood nematode. Trees are infected with the nematode during maturation feeding on young branches and shoots. After mating occurs, the adult female cuts funnel-shaped niches in the bark surface of suitable host trees and deposits one to several eggs in the cambium area. There are at least three generations per year in the southern states.



The southern pine sawyer, one of the longhorned beetles.

The southern pine sawyer often causes heavy losses in windthrown or fire-killed timber, in saw logs left too long in the woods before milling, and in improperly handled pulpwood. The first signs of attack are the funnel-shaped egg niches in the bark. Removal of the bark from infested wood will reveal coarse, excelsior-like wood shavings and sculptured wood. Elliptical-shaped holes tightly packed with wood shavings and frass indicate that the larvae have bored into the sapwood. Round, pencil-sized holes in the wood are the adult beetle's exit holes.

Prompt salvage and utilization of windthrown, dead and dying trees and green logs will reduce infestation and losses caused by this insect. When large numbers of trees require storage, they may be sprayed with insecticide, debarked or stored in water.

References:

Southern pine sawyer. Forest pests of North America in The Bugwood Network (<http://www.forestpests.org/southern/Insects/sps.htm>.)

U.S.D.A. Forest Service. 1985. Insects of Eastern Forests. Misc. Pub. 1426. 608 p.

Thought You Might Be Interested to Know . . .

Media Conditioning

A student at a state science fair won first prize by demonstrating how conditioned people have become to alarmists spreading fear of everything in our environment. In the project, the student urged people to sign a petition demanding strict control or total elimination of the chemical dihydrogen monoxide. Some of the reasons were: it can cause severe burns in the gaseous state, accidental inhalation can lead to death, it contributes to erosion, it contributes to the greenhouse effect.

The student asked 50 people if they supported a ban on the chemical. Forty-three people (86 percent) said they would support it, 12 percent were undecided, and one person actually knew that the chemical was water. Those desiring more information on this insidious chemical can go to the Dihydrogen Monoxide Research Division web site at: <http://www.dhmo.org/>.

Pounce on Weevils Earlier

An impact study conducted by the WGFPMP from 1996 to 1998 showed that pine reproduction weevils cause up to 60% pine seedling mortality, particularly on sites harvested late and with high levels of pine slash remaining. The Texas Department of Agriculture approved a 24C (Special Local Need) registration for Pounce® in 1997 to protect newly planted pine seedlings from weevils. However, different sources indicated that Pounce® activity would last as little as 3 to 4 weeks or as long as 2 to 3 months. In light of this, I first suggested in 1998 that Pounce® be applied to seedlings in the nursery as late in the planting season as possible (late February and early March) to ensure that the chemical residual was high when weevils were most abundant in early April. The WGFPMP conducted a laboratory trial to determine the actual residual duration of Pounce®. Weevils, periodically exposed to sections of Pounce®-treated pine seedlings, experienced 100% mortality 2 ½ months after seedling treatment and still experienced 50% mortality 6 months after seedling treatment. These results now indicate that landowners can plant Pounce®-treated seedling as early as December and be confident that Pounce® residuals will be high enough during the critical period (March through May) when weevils are most abundant (see figure below). For more information, contact Don Grosman at 936/639-8170.

