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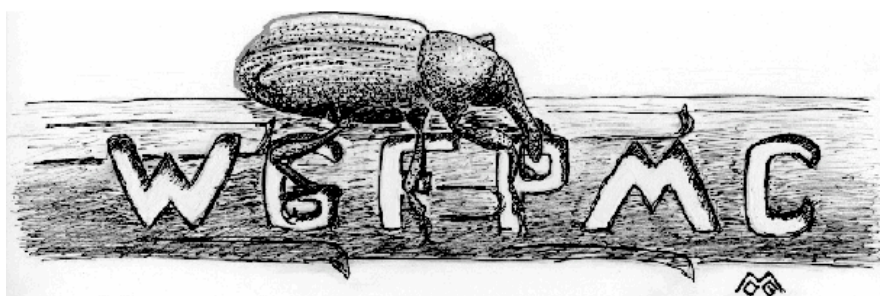
**Quarterly Newsletter
on Western Gulf
Forest Pest Management
Issues**

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:

Sporax® Now Registered in Texas. Although Sporax® (formerly known as Borax) has been registered in the United States to control annosus root disease since 1995, it was recently discovered that this product was not officially registered in Texas. Willbur-Ellis, the product manufacturer, has agreed to register Sporax® in Texas and has made arrangements with Red River Specialties (409/384-7965) to distribute the product. Sporax® is being sold in 25 lb. packets for \$49.75 per packet.

Western Gulf Forest Pest Management Cooperative



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

Status of Volcano® Use Language

In the last issue of PEST (Oct. 2001) I reported that a 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 suggested to me that Volcano® only could 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 (up to 300 feet) that frequently extend into replanted areas. The ants emerge from these trails to 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 submitted a letter to EPA, through Griffin L.L.C., asking that they strongly consider retaining the site use as "pine forests sites." Unfortunately, EPA would not retain "pine forest sites". Instead EPA modified the language which will state on the front panel: "Pine reforestation sites including areas directly adjacent to these sites". Also, in the USE DIRECTIONS, the phrase "Treatment can be made to ant colonies within the reforestation site and to colonies immediately surrounding the site" will be included. Jimmy Whatley has indicated that the product that Red River Specialties has in stock or has already been purchased could be used with the current wording (Pine forest sites). "The change in use language will go into effect with the next production run this fall," according to Jimmy.

The potential for registration of Blitz® in the United States is still under review. I will keep you informed as events unfold.

Don Grosman, WGFP MC Coordinator

Pest Spotlight: Black Turpentine Beetle

I received a call in August from one of our WGFPNC members indicating that he had observed some tree mortality at two of his progeny test sites; one containing loblolly pine and the other longleaf pine. I was asked to come out and take a look. What I found were pockets of tree mortality at both locations that appeared to start with single trees dying at the edges of the progeny test plots and spreading out from these points. A closer look revealed that the trees had been or were being attacked by the black turpentine beetle, *Dendroctonus terebrans*.

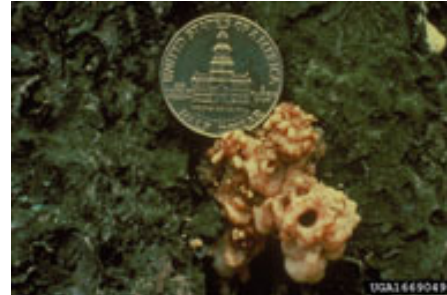
The black turpentine beetle, a close cousin of the southern pine beetle (*Dendroctonus frontalis*), is found from New Hampshire south to Florida and west to east Texas. Attacks have been observed on all species of pine native to the South. This beetle is most common in pine naval stores, pines stressed for lighterwood production, and damaged pines in urban areas. **Note:** I suspect that the trees at the progeny test sites had been stressed by severe drought conditions occurring over the past few years.

The adult insect is dark brown to black in color and 3/8 inch in length. The posterior end is rounded (this contrasts with the concave posteriors of the *Ips* engraver beetles). Full grown larvae are white with a reddish brown head and about 1/3 inch long. Pupae are about 1/4 inch in length and yellowish white.



Black turpentine beetles attack fresh stumps and the lower trunk of living trees. Initial attacks are generally within 2 feet of the ground. Attacks are identified by white to reddish-brown pitch tubes about the size of a half dollar. The pitch

tubes are located in bark crevices on the lower tree bole, usually below a height of 10 feet. Infested pines are often attacked by other bark beetles (i.e., southern pine beetle and *Ips* engraver beetles).



Adult beetles bore into the cambium and construct galleries which usually extend downward. Eggs are laid in clusters and hatch in 10 to 14 days. Larvae feed side by side, excavating a large continuous area. The life cycle takes from 2 1/2 to 4 months, depending on the season. There are two to four generations per year.

Natural enemies and good tree vigor generally keep black turpentine beetle populations at low levels. Newly attacked trees can often be saved by spraying the base to the highest pitch tube on the trunk with an approved insecticide. Preventative sprays also are effective for high value trees. The following insecticide formulations are suggested to be used by licensed certified pesticide applicators to control black turpentine beetle: chlorpyrifos, lindane, permethrin or cypermethrin. **Note:** Most chlorpyrifos uses will be phased out by 12/31/01 and lindane is very hard to find. Thoroughly drench the lower 6 feet of the trunk and buttress roots with a forceful spray in mid-April and again in mid-May. Reapply in the summer if adults are still present. The prompt removal of infested trees also helps to control outbreaks. Forest management practices which promote tree vigor and minimize root and trunk damage help prevent infestations.

Reference: USDA Forest Service. 1997. Insect and Diseases of Trees of the South.. Protection Rep. R8-PR 16. p. 98

Thought You Might Be Interested to Know . . .

Azinphos-methyl (Guthion) and Phosmet (Imidan) Cancellations

(Source: EPA Press Release, 10-31-01 via Georgia Pest Management Newsletter, Nov. 2001).

For azinphos-methyl (AM), 28 crop uses are being canceled, seven crop uses are being phased-out over four years (almonds, tart cherries, cotton, cranberries, peaches, pistachios, and walnuts) and eight uses (apples/crab apples, blueberries, sweet cherries, pears, **pine seed orchards**, Brussels sprouts, cane berries, and nursery quarantine uses) will be allowed to continue "time-limited" registration for another four years. Prior to the expiration of the four-year period, EPA will conduct a comprehensive review of these eight crop uses, based on the latest scientific information, to determine if it should continue to allow registration. For the 28 crop uses being canceled, there will be no phase-out period since there are viable alternatives.

For phosmet (P), three uses are being voluntarily canceled, nine crops are being authorized for use under specific terms for five years, and 33 crops (including **pine seed orchards**) are being approved for continued use. The three voluntary cancellations include use on: domestic pets, household ornamentals, and household fruit trees (phosmet is rarely used for these purposes). Growers will be able to use phosmet for five years on nine crops: apples, apricots, blueberries, crab apples, grapes, nectarines, peaches, pears and plums/dried plums.

Additionally, a variety of stringent new precautions are being implemented for both pesticides to reduce worker exposure. The re-entry intervals will be increased (**45 days REI for AM vs. 24 hour REI for P in pine seed orchards**); the number of applications will be limited (**2 appl. @ 1.0 lb ai/acre/yr for AM vs. 6 appl. @ 1.05 lb ai/acre/yr in pine seed orchards**); and aerial application will be prohibited for nearly all uses (**pine seed orchards exempt**). During this period, EPA will also require studies on the potential health effects on workers. If new information shows unreasonable risks, the Agency could take immediate action to remove any of these uses.

EPA will accept comments on these interim decisions for 60 days. You can find the information at <http://www.epa.gov/pesticides> (EPA Press Release, 10-31-01)

Herbicide Resistance Found

(Source: Chem. Speak, Mar. 2001 via Arkansas Pesticide News, June 2001).

Horseweed (*Conyza canadensis*) along the U.S. east coast joins ryegrass in Australia and goosegrass in Malaysia as known glyphosate-resistant plants. The horseweed plants collected from Delaware were greenhouse cultured and found to be able to withstand glyphosate at 10 times the normal lethal dosage and that the resistance was due to selection pressure, rather than genes shifting from crop to weed.

Dimethoate Registration

(OPMP Update, May 8, 2001 via Chemically Speaking, June, 2001)

The technical registrants for dimethoate are not supporting residential uses (gardens, fruit trees, ornamentals, fly control). EPA has sent a letter to all dimethoate registrants requesting that they amend all pertinent labels to delete all non-agricultural uses.

Pesticide Storage and Security

(Source: Illinois Pesticide Review, Nov. 2001 – Authored by Phil Nixon and Bruce Paulsrud)

Proper storage is important for keeping pesticides in good condition for use next year, as well as for keeping children and unauthorized people from tampering with these products. Pesticides should not be exposed to temperatures over 110°F, or breakdown and loss of effectiveness can occur. Also, check the pesticide label to see if you should guard against freezing temperatures. Store your herbicides separately from insecticides, fungicides, and other pesticides to avoid their contamination from herbicide fumes.

Pesticides should be kept locked up except when they are being used. Even when you remove a container of pesticide for use, you should keep the storage area locked while mixing and loading the sprayer, spreader, or other application equipment. Even if the storage area is in sight of the mixing and loading area, you may be called away to the phone or to assist someone else. Just a few minutes' absence can be enough for a child or another person to find the storage area and become poisoned. Given today's concern about terrorism, consider that an unauthorized person entering the area may be more than a curious passerby. Sprayers, spreaders, and other pesticide-application equipment should also be kept locked up and secured to protect it from tampering and accidents. Be especially watchful and suspicious of unauthorized people in these areas.

In addition to being kept locked, the pesticide storage area should be plainly labeled as a pesticide storage area. A sign stating "Danger-Pesticides-Keep Out" or similar information should be appropriate. If you have Hispanic employees who do not read English, then the warning also should be in Spanish. A list of stored pesticides should be kept in your office and with the local fire department. There also should be a map or other information indicating which particular building and part of the building contain pesticides. This information can be very useful to the fire department for the protection of firefighters, as well as for avoiding environmental contamination from pesticide being carried away with water used to fight the fire. Near the pesticide storage area, there should be soap and water for washing pesticide off your hands or other skin areas. Maintain an eyewash station, or at least have a faucet or hose for splashes into the eye. The first aid for eye exposure by many pesticides is to wash the eyeball with running water for at least 15 minutes.

Have a fire extinguisher handy because many pesticides are flammable. An absorbent material should be available for any liquid pesticide spills. This may be sawdust, kitty litter, oil dry, or specialized absorbent pads or "snakes" to surround and contain spills. Have a broom, dustpan, and trash can to pick up and store any dry spills or absorbed liquid spills until they can be disposed of properly. Pesticide labels have a telephone number to contact the pesticide company on the proper method to dispose of spilled pesticide. Local emergency personnel such as fire and police departments, as well as the Illinois Environmental Protection Agency, can also provide assistance.

Use the following checklist to improve the safety and security of your facility and pesticide storage area:

- 1) For safety reasons, label your pesticide storage building with a sign stating "Danger-Pesticides-Keep Out," and post a list of emergency contacts at the main entrance to the storage area. Include the names, addresses, and phone numbers of at least two key employees, and the phone numbers for the police and the fire departments. In addition, "Emergency: Dial 911" (if applicable in your area) and the Illinois Poison Center (800-222-1222) should also be listed.
- 2) Keep inventory records of pesticides up-to-date and easily accessible. A current inventory list and map clearly showing which building(s) or parts of buildings contain pesticides should be kept with the fire department in case there is a fire at your facility.

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Pesticide Storage and Security (Continued from Page 1)

- 3) Have a complete label and Material Safety Data Sheet (MSDS) for every product on the premises.
- 4) Ensure pesticide storage areas are locked and secure when unattended, and strictly limit access to storage areas by limiting and tracking who has keys.
- 5) Storage areas should be well lighted and sturdy so any attempt to force entry requires a substantial effort that likely would be noticed and reported. To enhance security, provide adequate outside lighting and consider using a surveillance system or security service.
- 6) Block ramps and driveways at night and disable forklifts and other equipment that could be used during a theft. Secure application equipment to prevent sabotage, theft, and misuse. Inspect storage areas and equipment regularly.
- 7) Be alert to strangers that snoop around the facility asking unusual questions and also to purchasers who:
 - seem unfamiliar with details of using a pesticide (casually ask them a few pest or pesticide-use questions), act nervous, seem uneasy or vague, and avoid eye contact;
 - demand immediate possession of purchased material rather than future delivery;
 - ask for material in smaller, individual containers rather than in bulk;
 - insist on paying with cash instead of using credit or a check.
- 8) In addition to your regular sales records (only licensed applicators may purchase restricted-use pesticides, and the dealer is required to keep records), keep a log of suspicious persons or activities by writing down the date, suspicious activity, a physical description of the person, license plate number, and vehicle description. In the event of a theft or any signs of tampering or attempts to force entry, contact the police and provide them with a copy of your log book.
- 9) Be proactive and discuss pesticide safety, storage, and security issues with your employees.

For more information about accident prevention, chemical security, and facility design, see "Chemical Accident Prevention: Site Security (EPA, Feb 2000)," available online at <http://www.epa.gov/swercepp/pubs/secale.pdf>. This 8-page publication also provides a valuable list of organizations, Web sites, and books addressing these issues in more depth.

Darwin Award Winners

(Source <http://www.darwinaward.com>)

Here are a couple of true stories about people who have recently won Darwin Awards after attempting their brand of pest management. What's a Darwin? Darwins celebrate life by reminding us how close we've each come to death as a result of our own foolish actions. Aren't you relieved that YOU have (thus far) managed to avoid the "wet feet & light switch" accident? These poor folks fared worse... Enjoy, but remember – think before you leap.

Firebug

I was 15 in the summer of 1994, and I needed to mow the lawn. As I walked into the garage on a mission to refuel the lawnmower, I was diverted by the sight of ants streaming everywhere. I couldn't find any bug spray, but I did find the gas can for the lawnmower. Gasoline would kill the ants!

I began to pour fuel on the ants. My extermination plan was working well, but the process was kind of boring. I thought to myself, "Fire is exciting... and the garage floor is concrete, so I won't hurt anything..."

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Darwin Awards (Continued from Page 5)

So there I was lighting my ant-killing gas puddles, selecting bigger and bigger ones each time. Suddenly I noticed that the gasoline can was on fire! I tried to kick it out of the garage, but instead it landed in the corner where Mom kept wooden poles for the garden. They went up in a flash.

I grabbed the burning gasoline can and tossed it in the driveway -- where the lawnmower stood waiting for me to stop killing ants and remember my chore. The lawnmower caught fire, so I shoved it down the driveway to keep it from exploding near me. By the time it blew up across the street, the fire had spread in the garage.

I was calling 911 when I heard a loud BOOM! Evidently there had been a propane tank by the late tomato poles. It certainly wasn't there anymore, if you know what I mean! I hung up the phone and grabbed the garden hose, and began fighting the flames.

The fire department finally arrived and controlled the blaze. I had caused \$15,000 in damage to the house and garage, and suffered second degree burns on my legs and the hand I used to grab the burning gasoline can. I'm still alive by divine miracle, and not ONCE since then have I started a conflagration.

I earned the nickname Firebug, and the ants never came back.

Wasps

When I was ten we had a five-foot hedge bordering our yard. My father decided to cut it down to two feet, so he pulled out his heavy-duty hedge clippers and set about the job. When he was three quarters done, he hit a wasp's nest and cut it right in half! The wasps, as you can imagine, were not happy.

My father made it to the end of the driveway, yelling and running every step of the way, before he passed out. Our neighbor rushed him to the hospital, where they counted 134 separate stings. During the next four days, he stared at the hospital wall while he hatched a scheme to rid himself of those confounded wasps forever.

When he was released, he returned to the hedge and saw that that the wasps had repaired their nest. It was a hot Saturday afternoon, and the insects were away from home and about their business. He poured a small cup of gasoline on the nest, and tied a gas-soaked rag to a 10-foot pole.

He was squatting on the ground, three yards from the nest, and I was standing behind him. We were both unaware that a cloud of gas fumes had collected in the hot, still summer air. When he held a lit match to the rag, a huge fireball erupted in the yard!

I have a vivid memory of flames chasing up the corner of the garage. My father was knocked back on top of me, which saved me from the heat -- but not him! The fire burnt out immediately, and the garage and I were undamaged, but my father lost his mustache, eyebrows, eyelashes, and half his hair. Back to the hospital he went!

For months after that, anytime he was asked what happened to his hair, he would only say "G-- D--- wasps".

Wishing Ya'll Pest Wishes for a Great Holiday Season and a Happy New Year!!!!