



# KENTUCKY PEST NEWS

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## CORN

### CORN BORERS STATUS - 1999

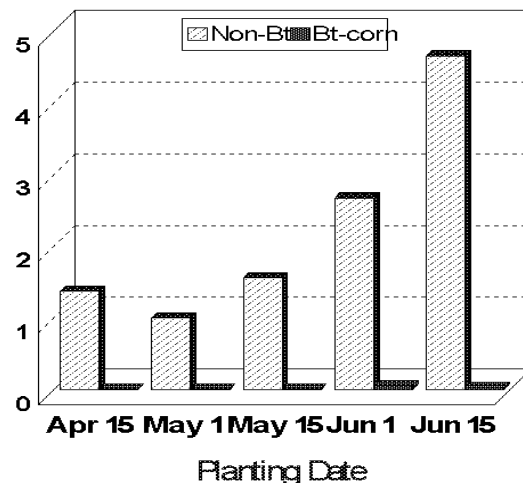
by Ric Bessin

There have been only scattered reports of corn borer activity during this past summer. While this may be due in part to lower corn borer levels across the state, there may be other reasons as well. Last year, many producers in the western part of the state were hit hard by corn borers, the southwestern corn borer in particular. Last year producers were not able to get the corn planted as early as they wanted, in some areas they still planting in late May and early June. This past season was very different. The relatively dry spring allowed most producers to get the bulk of their corn planted by the end of April or early May. Although southwestern corn borer levels were high in some areas this past spring, the early planting helped to avoid much of the serious losses seen in 1998.

Drs. Jim Herbeck, Doug Johnson and myself conducted a Bt-corn planting date study on the Princeton Research station this summer. In this study, two Pioneer hybrid isolines were compared for yield and damage to corn borers. The isolines differed only the presence or absence of Bt. The following graph illustrates the importance of planting dates relative to potential for corn borer damage.

The damage in this study was caused by a mixture of European and southwestern corn borers.

### SN/CB galleries per stalk



Generally, this supports the recommendation that corn planted after mid May is at greater risk to attack by corn borers.

## HOUSEHOLD

### FIREWOOD PESTS

By Mike Potter

This is the time when most homeowners begin to burn firewood. Firewood is a source of warmth and comfort, but can also be a way for pests to enter homes. Most pests living in firewood pose no threat to people, furniture, or to the structure. Nonetheless, homeowners often become concerned

when insects emerge from wood that is brought indoors and crawl or fly about the house.

Several types of pests may be found living in firewood. Termites, wood boring beetles and carpenter ants often tunnel and feed within firewood logs, *but upon emergence, usually will not infest structural wood or furniture inside the home.* Other kinds of pests simply hide or overwinter beneath the bark. Examples include centipedes, ground beetles, sowbugs, pillbugs, spiders, scorpions and wood cockroaches. Typically, these pests emerge within a few days of the wood being brought indoors. For the most part they are harmless other than by their presence.

### **Preventing Firewood Pests**

Control of firewood pests is best accomplished by management of the firewood itself. Spraying the wood with insecticides is not necessary, effective, nor recommended and could result in harmful vapors when the wood is burned. A much better approach is to:

- 1. Store firewood outdoors, only bringing in what you plan to burn immediately or within a few hours.** Storing firewood for extended periods inside the home, garage or basement allows pests developing or hiding in the wood to emerge within the structure. Firewood stored indoors can also become a harborage for rodents.
- 2. Position the woodpile away from the house and off the ground.** Firewood stacked against the side of a building impedes ventilation and encourages moisture problems. Storing the wood in this manner also provides a direct, hidden avenue for termites and carpenter ants into the structure. Stacking firewood off the ground (e.g., on poles suspended between concrete blocks) increases air circulation and drying.
- 3. Burn older wood first.** This shortens the time during which pest infestations can become established.
- 4. Shake or knock logs together to dislodge any pests clinging to bark.** Don't forget to check bottoms of log carriers, since pests often crawl into these when logs are transported into the home. The occasional insect emerging from firewood can easily be eliminated using a broom or a vacuum cleaner.

## **LIVESTOCK**

### **CATTLE LICE CONTROL - PART OF A TOTAL HERD HEALTH PROGRAM by Lee Townsend**

Biting and sucking lice can cause slow weight gain or even a gradual loss, louse-induced anemia, or lowered resistance to stresses, such as cold, wet weather. Additional losses can occur if control programs are not planned carefully and executed in a timely and economical manner.

Mixed infestations of biting and chewing lice can occur in a herd. Typically, only a small number of animals are heavily infested. A few lice survive the hot summer months on these "carrier" animals, usually bulls or old cows. The bull's longer, more dense coat and heavier neck and shoulders prevent him from grooming efficiently. Self-grooming helps to reduce louse numbers. Older cows can have a complex of interactions involving nutrition, general health, and the immune system that may contribute to their potential to maintain louse infestations.

During the cool fall and cold winter months, lice numbers increase. They spread from carrier or reservoir animals to the rest of the herd as the animals bunch together. In time, the whole herd may become infested but usually only a few animals become extremely lousy. Infested animals rub and scratch excessively in response to the irritation caused by lice.

Confirm a suspected louse infestation by a careful examination of the most agitated animals. Part the hair at points along the neck, head and around the eyes, on the withers, brisket, and shoulders to look for nits (eggs) and lice. Sucking lice can occur in patches. They have narrow, pointed heads and tend to remain attached to the animal. Chewing lice are more active and have a wider, triangular head.

There are several control options for lice but the list of options narrows, especially at this time of year.

**!** We are beyond the treatment date for cattle grubs, so a systemic insecticide (fenthion, prolate) should not be used unless a grub treatment was applied earlier.

! A whole animal spray gives the good coverage needed for effective louse control and is also one of the cheapest treatments.

! This leaves pour-ons and dusts as relatively "dry" alternatives. The information below summarizes some of the factors to consider when making a choice.

Check the label carefully before you buy. For example, you may find different costs for products containing the same concentration a specific active ingredient. Also, look at the application rate and method. Some products have an applicator or measuring device to help deliver accurate doses. This is very helpful when dose rates are just a few cc's per head. Note other cautions or restrictions on the label. Especially important are the time to wait between applications (two are needed for louse control because the egg or nit stage is not killed) and protective equipment to be used during application.

#### Dusts

Common Name	Brand Name
Co-Ral 1%	coumaphos
Zipcide 1%	coumaphos
Permethrin 0.25%	permethrin

#### Pour-ons

Delice 1% Pouron	permethrin
Synergized Expar	permethrin + piperonyl butoxide
Brute 10% RTU	permethrin
CyLence 1% RTU	cyfluthrin

Delice is a ready to use formulation that is to be poured along the back of the animal. A second application is recommended 14 days later. This synthetic pyrethroid insecticide is non-systemic and is not a cholinesterase inhibitor. This product can be used on lactating and non-lactating dairy cattle.

Brute contains the same active ingredient as in Delice but is more concentrated. A 500 pound animal would receive 1/4 ounce of the product. The same characteristics listed for Delice apply for this product.

Synergized Expar contains the same active ingredient as in Delice, along with a synergist (piperonyl butoxide). It is applied at the same rate

and in the same manner. This product can be used on lactating and non-lactating dairy cattle.

CyLence, a synthetic pyrethroid insecticide, is non-systemic and is not a cholinesterase inhibitor. Doses are very low, 8 cc for a 400-800 pound animal. This product can cause substantial but temporary eye injury so applicators should wear goggles, a face shield, or safety glasses. A second treatment should be made in 3 weeks. This product can be used on lactating and non-lactating dairy cattle.

## PESTICIDE NEWS AND VIEWS

### COMPASS LABELED FOR ORNAMENTALS AND TURF

by Paul Vincelli and John Hartman

Compass, a new fungicide from Novartis, recently received EPA registration for use to control diseases of turfgrasses and ornamentals. The active ingredient in Compass is trifloxystrobin. This material is a strobilurin fungicide in the same family of fungicides as Heritage (azoxystrobin from Zeneca) and Cygnus (kresoxym-methyl from BASF). The strobilurin fungicides are considered by EPA to be reduced risk pesticides, and as such, should have a low impact on the environment and on fungicide applicators. Like Heritage and Cygnus, Compass is active against a broad range of fungal pathogens and is used at low rates (0.1 to 0.25 oz of Compass 50WDG per thousand square feet for turf, or 1-4 oz per 100 gal. for ornamental foliar diseases).

Compass can be used on a wide variety of turfgrasses, including golf courses, commercial and residential lawns, and sports fields. In UK tests for gray leaf spot control conducted thus far, Compass applied by itself has provided good control when used at high rates and frequent intervals, but the use of low labeled rates or long spray intervals may result in unacceptable levels of disease. We have limited data for Compass applied to putting greens, but in a recent UK test, a tank-mix of Banner MAXX plus Compass 50 WDG (1 fl oz and 0.15 oz, respectively, per 1000 sq ft) applied biweekly provided good control of dollar spot, brown patch, red leaf spot, and anthracnose. Compass probably will not be used much by itself on putting greens because, like Heritage, it does not provide control of

dollar spot. Later this year, we will review all published data concerning Compass and include our assessment of its efficacy in a revised Extension publication, Chemical Control of Turfgrass Diseases, PPA-1.

For ornamentals, Compass is labeled for 11 diverse diseases of 62 different host plants in the greenhouse, nursery, and landscape. For diseases of importance in Kentucky, Compass should be most effective against the powdery mildews, flowering crabapple scab, and rose black spot. The fungicide is also labeled for anthracnose diseases, cedar rusts, downy mildews, Botrytis gray mold and Rhizoctonia root rots. Be aware that not all strobilurin fungicides are active against the same diseases. Check the label for the disease and host plant for which it is to be used.

The potential for the development of trifloxystrobin-resistant strains of fungal pathogens is a significant concern with this product, as it is with all strobilurin fungicides. Because of this concern, there is a label restriction against applying the product more than twice sequentially for control of gray leaf spot, and three times for all other turf diseases. Similarly, in ornamentals, fungicide resistance management is essential. Use Compass preventively, rotate to a non-strobilurin fungicide after each application, and make no more than 4 applications of Compass during a growing or cropping season. Do not use Compass on vegetable transplants being grown in the greenhouse. Read and follow the label directions for application directions and precautions.

## **DIAGNOSTIC LAB - HIGHLIGHTS**

**by Julie Beale**

Recent samples in the Diagnostic lab have included: black root rot on holly, Botryosphaeria canker on linden, bacterial leaf scorch on oak, pine wilt disease caused by the pine wood nematode on Scots pine, drought stress and spider mite damage on evergreens (spruce, hemlock), mushroom identifications, and Sclerotinia stem rot on tomato (old stems containing sclerotia noted during fall garden cleaning).

