E-NEWSLETTER

New Pyrethroid Label Requirements

In an effort to reduce the potential for runoff and drift that can result from applications of pyrethroids, the EPA has revised the "Environmental Hazard Statements" and general "Directions for Use" sections for pyrethroid non-agricultural outdoor products. Pyrethroids include pesticide products such as "Talstar" (bifrenthin), "Tempo" (cyfluthrin), "Suspend" (deltamethrin), and others. The EPA revisions also apply to "combination products" such as: "Temprid SC," and "Transport WDG and "Transport ME." The new requirements also apply to consumer end pyrethroid-containing pesticides, such as "Ortho Home Defense Max" (bifenthrin), "Bayer Advance Home Pest Control" (cyfluthrin), and others.

The new environmental hazard statements are specific for different formulations (i.e., liquid, dust, granular, and ready-to-use products). The general "Directions for Use" included in this labeling initiative are considered to be best management and good stewardship practices.

Let's take a look at some of the new changes:

- **Requirements for *Granular Formulations* labeled or intended for outdoor residential uses:**
  - "Apply this product directly to the lawn or garden area. Water treated area as directed on this label. Do not water to the point of run-off."
  - "Do not make applications during rain."
- **Requirements for *Liquid, Dust, and Ready-to-Use Formulations* products labeled or intended for outdoor residential uses:**
  - "Do not water the treated area to the point of run-off."
  - "Do not make applications during rain."
- **Additional Application Restrictions For *General Outdoor Surface and Space Sprays*, except for outdoor fogging devices:**
  - "All outdoor applications must be limited to spot or crack-and-crevice treatments only, except for the following permitted uses:

    (1) Treatment to soil or vegetation around structures;
    (2) Applications to lawns, turf, and other vegetation;
    (3) Applications to building foundations, up to a maximum height of 3 ft.

Other than applications to building foundations, all outdoor applications to impervious surfaces such as sidewalks, driveways, patios, porches and structural surfaces (such as windows, doors, and eaves) are limited to spot and crack-and-crevice applications only."

Upcoming Classes

March 5
License Specimen Review

April 2
License Specimen Review

April 4
Ant ID & Management Workshop

April 30
License Specimen Review

May 15-16
Termite Technician Program

Visit our website at http://entomology.ncsu.edu/training for registration info and a list of all upcoming courses.

NEW PYRETHROID LABEL REQUIREMENTS CONT.

Although the label changes do not apply to turf (such as athletic fields and golf courses), these new label changes will affect the way you conduct pest management using pyrethroids.

The one restriction that will probably impact your usual pest management techniques the most is the limitation of structural sprays to impervious surfaces. If you need to do a perimeter treatment, you are still allowed to apply the product up the foundation wall (to a maximum height of 3 feet) and on the soil and vegetation around the building. The major change applies to outdoor applications to impervious surfaces like sidewalks, driveways, windows, doors, and eaves. For example, in an area where a driveway meets a garage door, you are limited to either a spot treatment (an area no larger than 2 square feet) or a crack-and-crevice treatment in that area because both areas (the garage door and the driveway) are considered impervious surfaces.

Most likely, if you're applying an exterior perimeter spray, you're dealing with a pest like ants, millipedes, ladybird beetles, or another equally persistent pest. In those cases, a crack-and-crevice application to those impervious structural surfaces like garage doors, windows, eaves, etc., will provide the most benefit anyway, as those areas are often points of entry for these pests. So, here's the good news: if you follow the new label requirements, you'll be using the product in a more efficient manner *and* the potential for runoff will be reduced. A win-win situation!

TERMITE SWARMS ALREADY REPORTED!

We all know that Eastern subterranean termites generally begin swarming late February or early March, depending on the weather. Swarming usually occurs during the day, particularly on warm days following rain.

We just had reports of three termite swarm calls in the Clinton area. As usual, the “unusual” warm winter weather and that bout of much-needed rain triggered the burst of activity. We’ll probably see a few more scattered around, even up in the mountains, particularly in slab structures.

So don’t be surprised if you start receiving calls from customers reporting termite swarms (if you haven’t already).

BOOKLICE (PSOCIDS)

Adult booklice are very small, ranging from 1/25 to 1/13 of an inch. Most booklice are found outdoors on or under the bark of trees and shrubs. Outdoor species are commonly referred to as barklice and are usually winged as adults. Species that frequently inhabit homes and other structures are wingless as adults, have extremely flattened bodies and are translucent white to gray in color. Booklice may also be referred to as psocids or "paper lice". However, they are **not** true lice and do not bite or transmit disease.

Adult booklice (Photo by Univ. of Nebraska).

BOOKLICE CONT.

Interestingly, in some species of booklice, only females are present and immatures develop from unfertilized eggs, a process called parthenogenesis. Both male and females are present in some species. Females lay eggs which are either bare or encrusted and may sometimes be covered with webbing. Immature booklice, called "nymphs", look very similar to adults but are much smaller. There are four to six nymphal stages.

Booklice feed primarily on microscopic fungi and mold. Therefore, they are most often found in damp, dark areas. Such places may include basements, crawlspaces, kitchens, leaky plumbing, unvented storage areas, and around over-watered houseplants (see photo below). They may also show up in recently built homes where they entered during construction and were enclosed in a wall after siding and sheetrock were installed.

Plumbing leak (Photo by Mike Waldvogel).

Booklice are often associated with old books or other papers that are stored in damp conditions. These conditions promote the growth of mold or fungi on the pastes and glues of book bindings. They may also be found in food goods stored in humid conditions that support mold development. While their presence can cause great annoyance, they rarely cause significant damage to items.

Management

The presence of booklice can be quite an annoyance; however, they rarely cause significant damage to items. Most often, the damp conditions and developing mold or fungi have already caused the damage.

Non-chemical management

Reducing moisture and maintaining relative humidity below 50% will provide excellent control of booklice. Use a fan or dehumidifier to dry out damp rooms or other locations. Repair any leaky plumbing. Try to determine and remedy the cause of any condensation around doors, windows, air conditioning units, or other areas. Eliminate any standing water. Do not over-water houseplants. Reduce or eliminate potential harborage areas by sealing up cracks and crevices. Remove or dispose of items that could be harboring mold and fungi, such as old books, cardboard, papers, wallpaper, and food goods stored in damp conditions. Those items that cannot be removed or disposed of should be stored in airtight plastic bags or containers in cool, dry, and well ventilated areas. Clean up any spilled food goods such as cereal or flour that could serve as a source for mold growth.

Chemical management

Pesticides may not be needed to control booklice, especially if the recommendations listed above are followed. However, residual spray or dust insecticides may be applied as spot treatments or in the cracks and crevices of known or suspected harborage sites.