

CLEMSON UNIVERSITY

~ URBAN ENTOMOLOGY EXTENSION & RESEARCH ~

Palmetto Pestalk November 2000 Newsletter¹

Dr. Eric P. Benson
Urban Extension Entomologist
Department of Entomology
Clemson University
(864) 656-3111
fax: 656-5065
e-mail: ebenson@clemson.edu

My guess is that we've all learned new things since the last issue of Pestalk. For example, we could now hit the buzzer on Jeopardy when read the following statement under Politics for \$500 by host Alex Trebeck: "They can be hanging, dimpled or pregnant." Buzzzzzz. "Yes Eric?" "What is a chad, Alex?" Ding! "Correct answer for \$500!"

Yes, we know what a chad is now. However what I don't really know is how dimpled is dimpled and how pregnant is pregnant in the "chad world". Can a chad be partially dimpled, semi-dimpled or bodaciously dimpled? Perhaps it depends on what the definition of is....is.

What I do know is that all of this is in the gray realm of subjectivity. What may be sorta pregnant to me may be super pregnant to you. Who's right? Who decides who's right?

To make a ruling on subjective disputes for things such as determining the President of the United States, we may need the help of the Supreme Court. To make a ruling on subjective disputes on pest control issues between you and your client, I would

guess that your client would probably get to make the final decision.

For selling someone shoes or a necktie, the *customer is always right philosophy* may work all the time. However, this may not be the best philosophy all the time in pest control. The wants of your customer should never make you violate a pesticide label or do anything unethical. Your responsibility to your customer is superceded by your responsibility to apply insecticides and your craft to state and federal legal standards. These are established for the greater good of the population at large.

Perhaps your customer is always right, but their decision may not be right for you. By knowing the difference between being flexible and unethical, you may be able to avoid some heartache in this subjective world. And this could make you smile, perhaps with an unequivocal dimple or two.

2001 Winter School Fulfilling the Future

Once again a great speaker line-up will greet South Carolina Pest Control professionals at the 42nd Annual Winter Conference, February 13-15, 2001. The conference location has changed this year. Instead of the meeting being at the Sheraton on Bush River Road in Columbia, the meeting will

be held at the Adam's Mark Hotel on the corner of Main and Hampton Streets in Columbia. This location is downtown, near the Capitol and near a host of stores, restaurants and places of interest. Change is always a risky adventure, but we hope our new venue will provide an improved and exciting meeting environment.

As we enter a new a millennium our theme is "Fulfilling the Future". To fulfill our annual goal of putting together a great program, we will have a host of nationally renowned speakers, including Mr. John McCann who will make the keynote address on accepting change. Mr. McCann will also make a presentation on improving communications in your company. Dr. Mike Potter from the University of Kentucky will discuss the changing face of termite control and how to make insect identifications in the field. Dr. Jeff Tucker from Texas will cover control strategies for ants. Mr. Fred Strickland, a renowned trainer from Mobile Alabama will provide information on practical training methods and using computers effectively. Mr. Allen Fugler, the past Executive Secretary from the Louisiana Pest Control Association, will talk about recognizing risk and will provide insight on Formosan termites. We will also have two workshops on Thursday

afternoon on field identification of stinging pests and spiders for general pest technicians and new, cool, tool time for termite technicians.

The rest of the program will be rounded out by presentations from Clemson University researchers and regulatory officials, researchers from the Medical University of South Carolina, as well as industry leaders from private companies, the NPMA and the South Carolina Pest Control Association. If you are interested in attending this dynamic conference, please see the enclosed information in this issue of Pestalk and contact Ms. Jackie Ellis, Clemson University, Clemson, SC, at (864) 656-5048 or by email: jells@clemson.edu.

Formosan Termites Found Established In Rock Hill

This past October, Pat Zungoli from Clemson University confirmed that Formosan subterranean termites were present in a tree that was removed by the City of Rock Hill. This is the first time that Formosan termites have been found established this far from the coast in South Carolina. Previously they have been found in Rutherford County, North Carolina, which is even farther inland.

While this is a new county record for this termite in South Carolina, it should not be the cause of undue concern. The Formosan termite should be treated as any other subterranean termite infestation.

The colony was reported by Clark Beavins, the forester for

the City of Rock Hill, who contacted the university. The Clemson team of scientists who made the initial visit to the site included Pat Zungoli, Eric Paysen and Kevin Hawthorne from the Entomology Department, and Mike Weyman from the university's Department of Pesticide Regulation.

The infested tree was removed and the Clemson team and Beavins worked with the tree service to make sure the tree was disposed of properly. At this point there are no other reports of Formosan termites in the Rock Hill area.

It is important that homeowners understand that termites are beneficial insects in nature where they serve as important recyclers that convert dead trees into nutrients for the soil. However, they become a problem when humans build their homes or other buildings near a colony and termites infest the structure. Unfortunately, there is often an overstatement concerning aerial nests of Formosan termites. True aerial colonies of the Formosan termite are unusual and are most often found where there is an above-ground moisture source.

Several species of native subterranean termites are found in South Carolina. The Formosan termites were introduced into the state in Charleston in the mid-1950s and are being spread as humans move infested materials, such as old railroad ties. The Formosan termites cause concern because their colonies can be much larger

than those of native termites, sometimes including several million workers. However, Formosan subterranean termites are not "super termites". The same treatments that are used to control native termites are also effective on the Formosan termites. For more information and updated fact sheets on Formosan subterranean termites, visit the Clemson University entomology web site at <http://entweb.clemson.edu/urban/index.htm>. *Source: Pat Zungoli, Department of Entomology and Debbie Dalhouse, Clemson News Service.*

West Nile Virus Found In North Carolina

In the last issue of Pestalk, I wrote about the mosquito-borne disease, West Nile Virus. West Nile Virus has been a frequent topic in this year's news. The virus was first found in the United States in September 1999, in New York City. Though West Nile Virus has not been found in South Carolina to date, a dead crow was found recently in North Carolina that tested positive for the disease. Crows for unknown reasons are particularly susceptible to the disease. This discovery in North Carolina is the most southern record of the virus in the United States.

West Nile Virus is usually found in Africa, West Asia, and the Middle East. It is closely related to St. Louis encephalitis virus, a disease that is naturally found in the United States. West Nile Virus is caught through the bite of a mosquito that has the virus.

Mosquitoes get the virus by feeding on birds that have the virus. The mosquitoes then give the virus to humans and animals when they bite them.

Two common mosquito species, *Culex pipiens*, in the North, and *Culex quinquefasciatus*, in the South, are the main carriers of this disease. These mosquitoes are common around homes, breeding in stagnant water in rain barrels, tubs, catch basin, cesspools, ditches, ground pools, and other places where water stands for more than a week. The adults will enter homes and bite at night. These mosquitoes are higher in numbers in late summer. Due to their breeding habitats, the best way to control *C. pipiens* or *C. quinquefasciatus* is to get rid of stagnant water.

Crows are not the only animals that can get the disease. West Nile virus also afflicts horses, dogs, cats, bats, squirrels, raccoons, domestic rabbits and humans. The virus cannot be transmitted through contact with infected animals. Studies done in New York after the 1999 epidemic showed that about three-fourths of the people with West Nile Virus did not become sick at all. About one-third had a mild illness with fever, headache, and body aches, sometimes also with swollen lymph glands and a skin rash. Only a few (1%) had the dangerous infection called encephalitis which causes headache, high fever, neck stiffness, confusion, coma, tremors, convulsions, paralysis, and, in some cases, death. The time between the mosquito's bite and a person

becoming sick is usually 5 to 15 days. Anyone can get West Nile Virus if the virus is in the mosquitoes in the area, but persons over 50 years of age are most likely to get encephalitis. There is no vaccine to prevent the disease and there are no drugs to treat the disease.

West Nile Virus is not passed from person to person. You cannot get sick from touching or kissing a person who has West Nile Virus, or from a health care worker who has treated someone with the disease. No one has caught the virus from handling live or dead birds with the virus. However, everyone should avoid picking up any dead animal with bare hands.

Currently, the South Carolina Department of Health and Environmental Control is determining if West Nile Virus has spread to South Carolina. Their study includes catching mosquitoes and testing them for West Nile Virus, and looking into unusual wild bird deaths. You can get more information concerning West Nile Virus by contacting your local mosquito control program, your county health department, or by visiting the government web site: www.cdc.gov/ncidod/dvbid/abor/West_Nile_AQ.htm.

Source: SCDHEC.

Hazards Under The Sink

In the June issue of the American Journal of Public Health, a study was presented that assessed acute hazards of pesticides to young children. The research used information from a database maintained by

the American Association of Poison Control Centers.

From 1993-95, about 7,500 children younger than six years were exposed to Toxicity Category I or II pesticides. Three-fourths of the cases were children one or two years old. Of these children more than 98% had minor or no clinical effects resulting from their exposure. However, health care professionals treated 14% of the exposed children.

The surprising data are that disinfectants (primarily bathroom and kitchen cleaners) accounted for 93% of the exposures. Insecticides were identified in 6% of the cases.

Pest control professional should always follow label direction and use extreme care when applying any insecticides in areas where children live, play or go to school. However this study does indicate that while pest control professionals are often blamed for poisonings, parents are often the primary individuals responsible for children being exposed to pesticides. Unfortunately many parents do not understand that common cleaners and disinfectants can poison their kids.

The next time you are servicing a home with children, consider educating your clients to the hazards household cleaners can pose. Suggest that they keep all cleaning products stored in locations where they cannot be reached by children. *Source: Georgia Pest Management Newsletter, September, 2000.*

**Order of the
Palmetto
For Dr. Stanley
Schuman**

For many years, Dr. Stanley Schuman has been a regular speaker at the Annual South Carolina Pest Control Operator's Winter School. Working with the Agromedicine Program at the Medical University of South Carolina in Charleston, Dr. Schuman has made many important discoveries concerning the impacts of pests and pesticide use, especially in the urban environment. Dr. Schuman has always conducted and presented balanced research with a solid scientific basis.

For his outstanding contributions to the residents of South Carolina, Dr. Schuman has been honored with South Carolina's prestigious Order of the Palmetto award. Dr. Schuman received the award on November 3 from Mr. Nick Theodore, senior counsel to Governor Hodges.

We will be honored once again when Dr. Schuman addresses pest management professionals at our next Winter School on February 13 - 15. Congratulations Stan!

**Internships Prove
Fruitful**

This past summer, two undergraduate students in the Entomology Department participated in internships with pest control firms. J. R. Adkins interned with Gregory Th' Service That Cares in Greenville and Jeff Preacher interned with Atlantic Inc. in Charleston. Internships are a

great way for students to experience the "real world" and get solid job experience. Internships also provide interested employers with a chance to work with an individual before a long term hiring commitment is made.

In this issue of Pestalk, J.R. and Jeff summarized their experience. Please take a moment to read their articles. If you think you might be interested in providing an internship for future Clemson students, please call Pat Zungoli or me at 864/656-3111.

¹Note: This column is a regular submission to Palmetto Pestalk. For information concerning this publication contact:

Tom Gochnaur
9721 Dunbarton Drive
Columbia, SC 29223
Phone: 803-788-6699
FAX: 803-788-9698
Email: teegee342@aol.com

—