



Hurricane-Hardy Termites!

Not even Katrina's violent winds and watery aftermath proved sufficient to vanquish New Orleans's most tenacious residents: its Formosan subterranean termites. At first, there was hope that their numbers might have been lessened by high waters and other havoc unleashed by the deadly storm in August 2005. But data gathered from 125 monitoring traps placed throughout City Park in 2002 has shown that 82 percent of the traps that were active before Katrina were still active just a month after the storm. Other kinds of surveillance showed a slightly lower survival rate among colonies—especially those associated with pine trees.

Efforts are under way to explain the termites' remarkable survival. One theory is that a natural sealant they produce from saliva, chewed wood, and feces—called “carton”—may help waterproof a colony's extensive underground nest and corridor network. *Mary L. Cornelius and Weste L. Osbrink, USDA-ARS Formosan Subterranean Termite Research Unit, New Orleans, Louisiana; phone (504) 286-4449 [Cornelius], (504) 286-4593 [Osbrink], e-mail mcorneli@srrc.ars.usda.gov, osbrink@srrc.ars.usda.gov.*

Do Federal Conservation Programs Pay Off?

Over the past 2 years, the Water Quality Information Center (WQIC) at the National Agricultural Library has been assembling a series of current literature surveys pertaining to the U.S. Department of Agriculture's Conservation Effects Assessment Project, also known as “CEAP.” Participants in the multiyear, multiagency project are compiling data to help evaluate the environmental benefits of practices implemented through various USDA conservation programs over the years.

So far, WQIC staff have put together six bibliographies and made them available on the World Wide Web at www.nal.usda.gov/wqic/ceap. The two most recent ones posted are titled “Environmental Effects

of Conservation Practices on Grazing Lands” and “Wetlands in Agricultural Landscapes.” These online bibliographies should help identify gaps in knowledge and aid design of future conservation systems and policies. *Len Carey, USDA-ARS National Agricultural Library, Beltsville, Maryland; phone (301) 504-5564, e-mail lcarey@nal.usda.gov.*

Pheromone Found for Eggplant Pest



The eggplant flea beetle, *Epitrix fuscula*, doesn't confine its predations to eggplants. It also enjoys munching on other solanaceous crops—like tomatoes—unless checked by insecticide applications and cultural practices. Growers would like to have an alternative way to rein in this nuisance pest that could reduce the amount of chemicals applied, especially in spring, when *E. fuscula* is most damaging. That goal led to the quest for an attractant compound, or pheromone, that would draw the insects to a central location where they could be dealt with efficiently.

Host-feeding studies led to identification of six volatile compounds emitted by male *E. fuscula* beetles while feeding on eggplant leaves. Researchers who synthesized them and monitored the sensory responses of both males and females found that two compounds stimulated the greatest electrical response, as measured in the test beetles' antennae.

Field studies with eggplant showed that traps baited with the two active compounds attracted 500 percent more beetles than unbaited controls. Now the scientists are fine-tuning the ratio of the two compounds for maximum performance. *Bruce W. Zilkowski, USDA-ARS Crop Bioprotection Research Unit, National Center for Agricultural Utilization Research, Peoria, Illinois; phone (309) 681-6219, e-mail zilkowbw@ncaur.usda.gov.*

Checkin' on the Levees

Ever since Hurricane Katrina's waters receded from New Orleans, attention has

focused on rebuilding and reinforcing the levee system that protects the region from floodwaters. Called into service to help with these efforts is a device that tests how well soil resists water erosion. Called the “Jet Erosion Tool” (JET), it pumps a water jet at various flow rates to quickly determine the erodibility of soil used in structures such as levees. JET was originally designed to help evaluate the potential erosion of soil in earthen spillways, streambeds, and along embankments.

Levees that successfully held against Katrina's storm surge provided a baseline of acceptable erodibility against which newly repaired levees are being matched. That's because the soil used to rebuild them is coming from a variety of locations, so its resistance to erosion—once placed and compacted—may not be known. Having the objective JET measurement should help engineers enhance the future safety of the levees and dikes. *Gregory J. Hanson, USDA-ARS Hydraulic Engineering Research Unit, Stillwater, Oklahoma; phone (405) 624-4135, e-mail greg.hanson@ars.usda.gov.*

Environment-Friendly Fire Resistance

A new textile-finishing compound that imparts flame and extreme-heat resistance to enzyme-polished, machine-washable wool is available for licensing. The patented compound can be applied to yarn, fabric, or finished garments. Treated textiles are of interest to manufacturers for use in military or firefighter uniforms, as well as other garments for which fire retardancy is an important feature.

Current technologies used to impart heat resistance use metals or chemicals that are considered environmentally unfriendly. Now a business partner is being sought to license this innovative technology for further development. *Jeanette M. Cardamone, USDA-ARS Fats, Oils, and Animal Coproducts Research Unit, Wyndmoor, Pennsylvania; phone (215) 233-6680, e-mail jan.cardamone@ars.usda.gov.*