

**URBAN PEST CONTROL PROGRAM  
HOUSEHOLD AND STRUCTURAL ENTOMOLOGY RESEARCH PROGRAM  
COLLEGE OF AGRICULTURAL AND ENVIRONMENTAL SCIENCES  
UNIVERSITY OF GEORGIA , ATHENS, GEORGIA**

DATE OF REPORT TO COMMISSION: January 10, 2012

**PROGRESS REPORT:**

The CAES HSERP continues to investigate pertinent biological attributes of various pest species in our ongoing effort to integrate that knowledge into realistic options for pest management. The GDA IPM in Schools violations data, published as a dissertation with selected chapters now in review in several scholarly journals, indicates that pest management in Georgia schools was conducted on a calendar schedule rather than using IPM principles. The evidence is circumstantial but compelling in that 66% of the PUR's listed pyrethroid formulations assumed to be applied as liquid sprays. Products generally used as baits constituted only 24% of the insecticide formulations listed on PUR's. These data highlight a need for the Commission to address the topic of IPM training requirements. The HSERP published papers on termite colony sex ratio's, termite species determination using only genetic markers, described a new species of subterranean termite and kissing bug distribution on two barrier islands.

A field trial on drywood termite control using three different formulations indicated that a local or spot treatment regime have the potential to eliminate these cryptic pests from 8-ft long dimensional lumber with only 2 application points 9-inches from either end of the board. Fieldwork continues on drywood termite identification, biology and management using local treatments as injections or surface treatments. Laboratory research on termite behavior continues with assessment of feeding choice tests and tunneling bioassays using several species of subterranean termite in addition to experiments on identification and management of house dust mites.

**EXPENDITURES:**

Over \$70,000 was spent in salaries and staff benefits for permanent and temporary personnel in Athens attached to this program in 2011. Graduate student stipends/scholarships cost approximately \$35,000 in additional to \$10,000, for supplies and equipment entirely from extramural sources. Funds from the State Structural Pest Control Commission research fees provided for salary and benefits for a post-doctoral position at \$30,000.

**PLANNED RESEARCH:**

We plan to address the following research areas over the next year: (1) drywood termite identification and management; (2) different foraging and food utilization strategies used by the various subterranean termite species found in GA. (3) Identification and survey of house dust mites in GA.