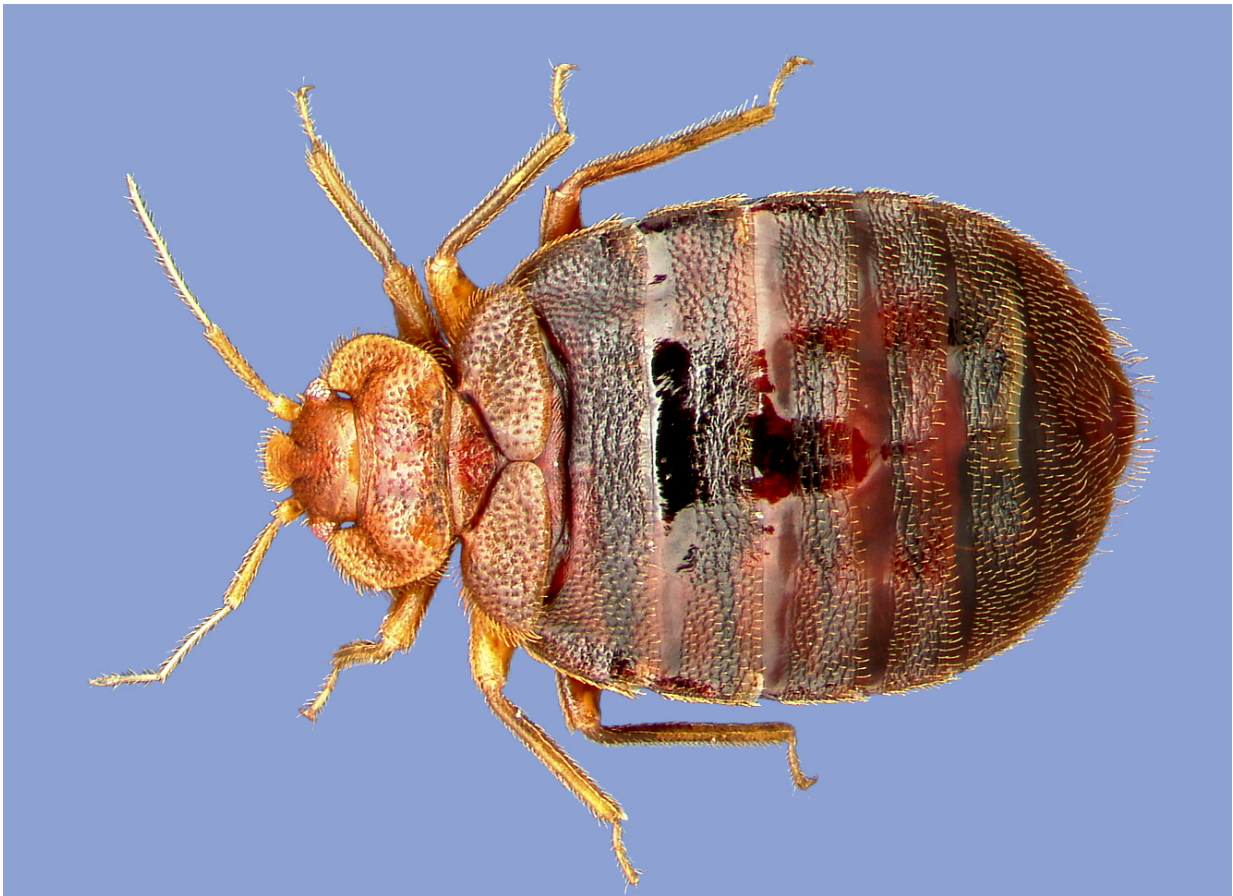


Bringing bugs to the classroom makes everyone smarter

September 21 2016, by Brad Buck



Through a curriculum appropriately titled, “Bed Bugs and Book Bags,” students worldwide are learning how to identify bed bugs, where they hide out and much more. The program teaches how to prevent the insects, and a new University of Florida Institute of Food and Agricultural Sciences study shows the hands-on learning experience works. Credit: UF/IFAS

Through a curriculum appropriately titled, "Bed Bugs and Book Bags," students worldwide are learning how to identify bed bugs, where they hide out and much more. The program teaches how to prevent the insects, and a new University of Florida Institute of Food and Agricultural Sciences study shows the hands-on learning experience works.

The project started in 2012 in Duval County Public Schools and teaches the public how to know if the insect is indeed a [bed bug](#) and then how to deal with it. As measured by students' increased knowledge of bed bugs, the curriculum succeeds in the United State, Canada, Israel and Saudi Arabia, the study shows.

Public knowledge of bed bugs is critical because the insects are coming back.

"Within the past few years, [bed bug infestations](#) have dramatically increased and have created major concern for society and for [pest management](#) professionals," said Roberto Pereira, a UF/IFAS associate research scientist in entomology and a lead author on the new study.

"They are thought to be the most difficult and expensive insect pests to control in the United States. By being aware of signs of infestation in our daily activities, we all can play our part to prevent spreading these pests."

Since implemented in Duval County, schools in the United States, Canada and a few places worldwide use the curriculum. The new study, published in the journal *American Entomologist*, assessed the pilot program in Duval County Public Schools.

Common bed bugs are tiny, parasitic insects that have been around for many centuries. They prefer to feed on human blood but are also known to obtain blood meals from bats, poultry, pets, livestock and laboratory animals. They can be found in all 50 states and many other countries.

Because bed bugs are not easily detected, they can travel from infested homes to school in a child's belongings, such as a book bag, and eventually affect other children, teachers and staff. Then schools sometimes compound the problem by spraying insecticides, which can lead to illness. Thus, among many concepts, the course materials show how to identify bed bugs so that a few do not turn into an infestation.

After Duval County school district administrators received calls from their schools in 2011 asking how to deal with bed bugs, the U.S. Environmental Protection Agency asked Duval County to form a task force to educate public schools about bed bugs, according to the study. The panel hoped that by teaching a new curriculum in schools, students would take the information home to their parents, friends and neighbors and tell them how to cope with the insects.

When the bed bug courses were first taught in 2012, almost everyone that took it learned more about bed bugs through the lesson plans, according to the study. In the schools, teachers taught the curriculum to third- through fifth-graders. Fifth-graders learned the most – one-third more knowledge—of any set of students.

Teachers and others also taught the course to adults in the community. Almost everyone who took the course learned more about what the insect industry calls "integrated pest management" – multiple ways of keeping certain insects under control. In fact, every group that was tested knew more about bed bug biology and the medical significance of bed bugs, the study showed.

Provided by University of Florida

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