

How to Make a Bed Bug Interceptor Trap out of Common Household Items¹

Benjamin A. Hottel, Rebecca W. Baldwin, Roberto M. Pereira, and Philip G. Koehler²

Bed bugs have become an increasingly common pest problem throughout the United States. They have been found in many different places where people congregate, from schools and restaurants to doctors' offices and movie theaters, but the worst infestations are usually in the places where people live, rest, and sleep, like houses, apartments, hotels, and homeless shelters. At these locations, bed bugs are most common around pieces of furniture people sit or lie down on—beds, chairs, and sofas. To discover whether bed bugs are present in a room or a piece of furniture, a device called a bed bug interceptor trap can be helpful. Interceptor traps catch and collect bed bugs when they try to travel between their human hosts and their hiding places. Bed bug interceptor traps are easy to make out of commonly found household items and disposable plastic containers.

How an Interceptor Trap Works

Interceptor traps placed on all of the legs of a piece of furniture can help prevent bed bugs from infesting that piece of furniture and also reduce the movement of bed bugs already on the furniture to the rest of the room. Interceptor traps rely on the poor ability of bed bugs to climb on smooth surfaces. The traps have rough areas to allow bed bugs to enter easily and a smooth-surfaced moat that prevents them from escaping. Bed bugs trying to either get onto or leave a piece of furniture find themselves trapped in this smooth-surfaced moat instead.

Items Needed to Create an Interceptor Trap

- 1. A small container that will fit under a furniture leg (example: a margarine tub or a food storage container)
- 2. A large container that the small container will fit inside (example: food storage container)
 - When the small container is placed within the larger container, there should be at least one-quarter inch space between the walls of the two containers
- 3. Rough-surfaced tape (example: masking tape)
- 4. Glue (example: hot glue gun or super glue)
- 5. *Option*: Surface applications to make escape from the traps even more difficult
 - Unscented baby powder (talcum powder)
 - Car polish
- 6. *Option*: Support structures for each trap to prevent the traps from cracking under the weight of the furniture
 - Square of tile
 - Square of plywood
- 1. This document is ENY-2029, one of a series of the Entomology and Nematology Department, UF/IFAS Extension. Original publication date January 2014. Visit the EDIS website at http://edis.ifas.ufl.edu.
- 2. Benjamin A. Hottel, graduate student; Rebecca W. Baldwin, undergraduate coordinator; Roberto M. Pereira, associate research scientist; Philip G. Koehler, professor; Department of Entomology and Nematology, UF/IFAS Extension, Gainesville, FL 32611.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. For more information on obtaining other UF/IFAS Extension publications, contact your county's UF/IFAS Extension office.



Figure 1. Items needed to make a single bed bug interceptor trap. From left to right and top to bottom: Car polish, square tile, baby powder, glue, large container, small container, rough-surfaced tape.

Step-by-Step Instructions for Creating an Interceptor Trap

1. Cut four pieces of rough-surfaced tape. The cut pieces should be at least as high as the wall of the smaller container.



Figure 2. Four pieces of rough-surfaced tape cut to match the height of the wall of the small container.

2. Evenly space and firmly press the four pieces of tape vertically on the inside surface of the smaller container to connect the inner top edge with the container bottom.



Figure 3. Rough-surfaced tape placed into the small container.

3. Wrap the rough-surfaced tape around the exterior side of the larger container so that the entire outer surface is covered from the base to the upper edge of the container.



Figure 4. Rough-surfaced tape and a large container are needed for step #3.



Figure 5. The rough-surfaced tape has been tightly wrapped around the large container. It is important that the tape is wrapped tightly and that no cracks or crevices are created where bed bugs can hide.

4. Glue the smaller container onto the center of the bottom of the larger container.



Figure 6. The small container has been glued inside the center of the large container. The walls of the containers should not touch.

5. Make surfaces smooth so that bed bugs cannot escape.

Option: Apply car polish or talcum powder to the interior side of the larger and exterior side of the smaller container. Follow the directions on the car polish bottle on how to apply and buff the product. If using talcum powder, do not touch the dusted trap surface with your hands. Talcum powder should be reapplied as necessary.



Figure 7. Baby powder and finished bed bug trap.



Figure 8. Use a sponge or a brush to dust the trap with powder.



Figure 9. Bed bug trap with finished talc application.

6. Move the piece of furniture to be protected away from walls and other furniture, and place a trap underneath each of its legs. With beds, bedding should not be touching the floor, walls, or other furniture.



Figure 10. Interceptor trap placed under the leg of a piece of furniture.

Option: On carpeted floor, place a square of tile or plywood underneath the trap to prevent the trap from breaking under the weight of the furniture.



Figure 11. Square of tile placed underneath an interceptor trap.

Any bed bugs found caught in the moat of the trap (Fig. 12) can be left there to die or drowned in soapy water. (Spray them with a 10% dish detergent and water mixture.) To make sure the insects in the trap are in fact bed bugs, take them to an expert for positive identification. Use tweezers or a cotton swab to put them in a leak-proof container of 70% rubbing alcohol. If you can't extract them from the trap because they've managed to creep under the smaller container, put the whole trap in a sealed plastic bag and take it to a pest control professional or county Extension agent, who can help you take the next step toward eradication.



Figure 12. Bed bug interceptor trap with victims.

Concluding Comments

Use bed bug interceptor traps in places of human habitation to detect bed bugs before they become established. It is much easier to manage a bed bug invasion if you catch it early. A few bed bugs can be stopped, but an infestation of thousands of them is much more difficult and expensive to control. Further information on bed bugs can be found at *Bed Bugs and Blood Sucking Conenose* http://edis.ifas.ufl.edu/ig083.