

DO-IT-YOURSELF

# How to Build Your Own Bedbug Detector.

Go ahead—scientists designed this so you can try it at home



BY SORA SONG

ITCHING FOR A GOOD AFTER-school science experiment? Researchers at Rutgers University in New Jersey have created a homemade bedbug trap using a plastic cat-food dish, an insulated jug and some dry-ice pellets. According to Wan-Tien Tsai, who reported her findings in December at the annual meeting of the Entomological Society of America, the dry-ice-and-thermos combo captured the bloodsucking critters in an infested apartment just as effectively as, if not more so than, equipment used by professional exterminators.

The most important part of this MacGyverized contraption is an insulated one-third-gallon jug—like the kind sold in camping-supply stores—filled with 2½ lb. of frozen carbon dioxide, which costs about \$1 per lb. (and should be handled only with gloves). As the dry-ice pellets slowly evaporate, the open thermos spout lets the CO<sub>2</sub>—which

falsely signals bedbugs that a breathing, blood-filled meal is nearby—seep out overnight. That's usually enough time to entice the nocturnal insects into the other key component of the trap: the overturned food-and-water dish on which the thermos sits. The bugs climb the outer surface of the dish, which can be scuffed with sandpaper for better traction, and get stuck in its moat, made slippery-smooth with a dusting of talcum powder.

This trap was designed to give consumers a cheap way to determine if they have—or, in many cases, *still* have—a bedbug problem that requires a proper extermination. Bedbugs have made a serious comeback in North America over the past few years, especially in big cities like Toronto and San Francisco. And they are notoriously hard to get rid of. As evidence, amid the enthusiastic talk on Bedbugger.com about the Rutgers invention, one commenter noted, "Dude, I am so going to try this once a month or so." ■



BUG BYTES

**\$20**

Estimated cost of materials for building your own bedbug detector

**4,084**

Bedbug infestations in New York City in fiscal year 2009, up 103% since 2007

**12**

Months adult bedbugs can survive without feeding