USDA United States Department of Agriculture National Institute of Food and Agriculture

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Northeastern IPM Center Partnership Grant Impacts

Developing Aesthetic Injury Level for German Cockroach* IPM (2018)
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Author: David Lane - Cornell University

Northeastern IPM Center

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THE NEED

- German cockroaches are the number-one indoor pest in low-income housing. Chronic and high prevalence of infestations are common in residential settings.
- Not only are cockroaches a nuisance, but they also produce allergens that are asthma triggers.
- Applications of insecticide sprays for cockroach control introduce additional health risks to inhabitants.


German cockroaches. Photos: C. Wang.

Cockroach infestation. Photo: C. Wang.

Insecticides introduce additional health risks. Photo: C. Wang.

IMPACTS

- **Non-chemical treatment achieved similar cockroach reduction** compared with baiting method for low-level infestations and **avoided the need for insecticide application**.


Trapper Monitor & Insect Trap beside stove for monitoring or controlling low-level German cockroach infestations. Photos: C. Wang.

There are a variety of gel bait products available on the market. It is wise to choose at least 3 different bait products and rotate them during the monthly services. Photos: C. Wang.

- This project helped inform **at least 3 publications**:
  1. "Residents Attitudes and Home Sanitation Predict Presence of German Cockroaches (Blattodea: Ectobiidae) in Apartments for Low-Income Senior Residents" (Wang et al., 2018) in *Journal of Economic Entomology*.
  2. "Effectiveness of Building-Wide Integrated Pest Management Programs for German Cockroach and Bed Bug in a High-Rise Apartment Building" (Wang et al., 2019) in *Journal of Integrated Pest Management*.
  3. *Biology and Management of the German Cockroach* (Wang et al., 2021)

WEBSITES

www.northeastipm.org/ipm-in-action/the-ipm-toolbox/reducing-pest-infestations-in-multifamily-housing-research-updates-on-mice-and-cockroaches/

* *Blattella germanica* L.

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