

# Forget the Sprays: Roaches and Their Allergens Reduced in Schools Using IPM

May 5 2009

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(PhysOrg.com) -- A North Carolina State University study shows that using integrated pest management (IPM) to control pests in public schools - monitoring closely for signs of pests and then utilizing baits and traps in areas where pests are located - reduces pests and their allergens more effectively than the conventional method of spraying pesticides on a predetermined schedule, whether there are cockroaches present or not.

IPM dramatically controls German cockroaches - common school pests - and reduces their allergens, resulting in a healthier environment for students, teachers and staff. Cockroach allergens are associated with allergies and [asthma](#) problems, particularly among inner-city children.

A study showing the results of tests comparing the two methods in several North Carolina schools appears in the May issue of the *Journal of Medical Entomology*.

The results are good news for the 70 North Carolina school districts that have already converted - or are currently converting - to IPM, say Dr. Godfrey Nalyanya, extension specialist in entomology, and Dr. Coby Schal, Blanton J. Whitmire Distinguished Professor of Entomology, two of the NC State researchers involved in the study. It's also good news for schools that haven't made the switch.

"North Carolina schools are mandated to convert to IPM by 2011, so these findings give credibility that IPM has superior and longer-lasting results than pesticide use alone," Nalyanya says.

The study examined the number of cockroaches caught in traps, as well as the concentrations of cockroach allergens in two school districts using the conventional method and one school district using IPM. Schools using IPM had no cockroaches caught in traps, and much lower concentrations of cockroach [allergen](#) Bla g 1 - the most common cockroach allergen - than schools using conventional pest control.

The study was so convincing that the two school districts using conventional pest control quickly made the switch to IPM, Nalyanya says.

IPM has been used in agricultural settings for many years, but is just starting to be used more heavily in buildings or structures, the researchers say.

While this study and others conducted by NC State scientists show that IPM is more effective and ecologically superior to conventional pest control methods, Nalyanya and Schal say that there's long-term economic benefit as well. Setting up the IPM infrastructure and changing existing contracts with [pest](#) control providers takes time and money, but the results are worth it.

"The monetary costs for IPM might be higher initially, but it pays for itself down the road and provides a healthier school environment," Nalyanya says.

Provided by North Carolina State University ([news](#) : [web](#))

Citation: Forget the Sprays: Roaches and Their Allergens Reduced in Schools Using IPM (2009, May 5) retrieved 20 April 2024 from <https://medicalxpress.com/news/2009-05-roaches-allergens-schools-ipm.html>

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