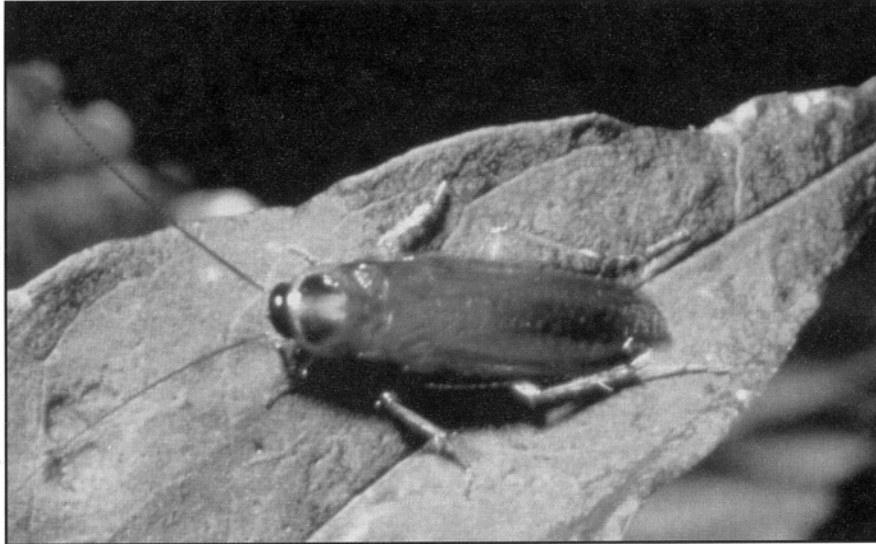


# The Nicaraguan Cockroach

## Our Newest Immigrant

by Thomas H. Atkinson, Ph.D., Philip G. Koehler, Ph.D., and  
Richard S. Patterson, Ph.D.



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Figure 1. The Nicaraguan cockroach, *Ischnoptera bergrothi*, a newly introduced outdoor cockroach found in Florida and Louisiana.

It's a bird, no it's a plane, no — yuck! It's a flying cockroach. Just when you're getting used to the idea of Asian cockroaches, here comes a new arrival from Central America, *Ischnoptera bergrothi* (Griffini), the Nicaraguan cockroach. The publicity surrounding the introduction of the Asian cockroach (Brenner et al. 1986, 1988) has raised people's awareness of outdoor cockroaches, especially those that fly. Due to a superficial resemblance to the Asian cockroach, *I. bergrothi* is commonly mistaken for that species.

The Nicaraguan cockroach is native to Central America, from Panama to Nicaragua. U.S. cockroach researchers have been aware for several years that another non-

native species existed in this country, but no one could identify it. Specimens from Florida were first identified by Dr. Frank Fisk, Ohio State University (retired), who recognized it from previous work in its area of origin.

It is well-established in south-central Florida, northern Florida, and westward to southern

Louisiana. Given the size of the area it already covers, Nicaraguan cockroaches have probably been in this country for some time, but only in the last several years have populations in local areas reached noticeable numbers. Distribution patterns of native and introduced cockroaches (Atkinson et al. 1990, in press) suggest that its range will almost certainly spread to include the Gulf and lower Atlantic Coastal Plains from central Texas to Georgia or South Carolina. Whether or not it will be able to survive in inland areas or further north remains to be seen.

Based on our observations in Florida, the Nicaraguan cockroach is most abundant in open, moist grassy and weedy meadows. It does not thrive in marshes or wetland vegetation, but is common in low vegetation near river banks, lakes, ponds, and marshes. This cockroach is not primarily a woodland species. When we trap in areas where meadows adjoin wood lots, the numbers we cap-

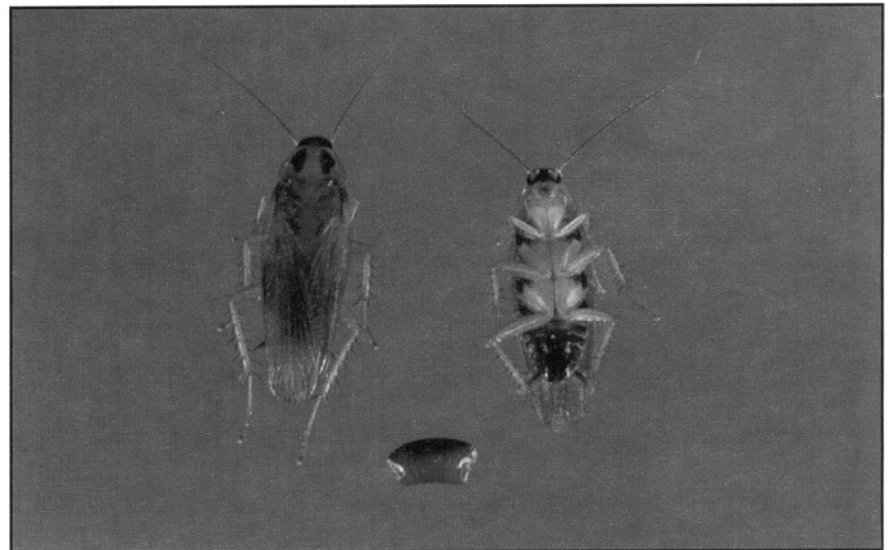


Figure 2. Closeup of the Nicaraguan cockroach. Note the two dark spots on the pronotum or "shoulders," reddish brown color, and shiny black underside. The dark reddish brown, curved egg case is carried by the female for one-to-two days.

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ture drop drastically as we enter the forested area.

While the Nicaraguan cockroach will hide under boards and in debris, it does not seem to require well-defined harborages such as wood and refuse piles, hollow trees, or logs, as do other outdoor cockroaches such as smokybrown or American cockroaches, or some *Parcoblatta* species. The cockroach apparently hides near the soil surface under leaf litter and thatch during the daytime, becoming active in the evening.

Both males and females fly readily and are attracted to lights. We have seen no indication that the Nicaraguan cockroach is inclined or able to sustain breeding

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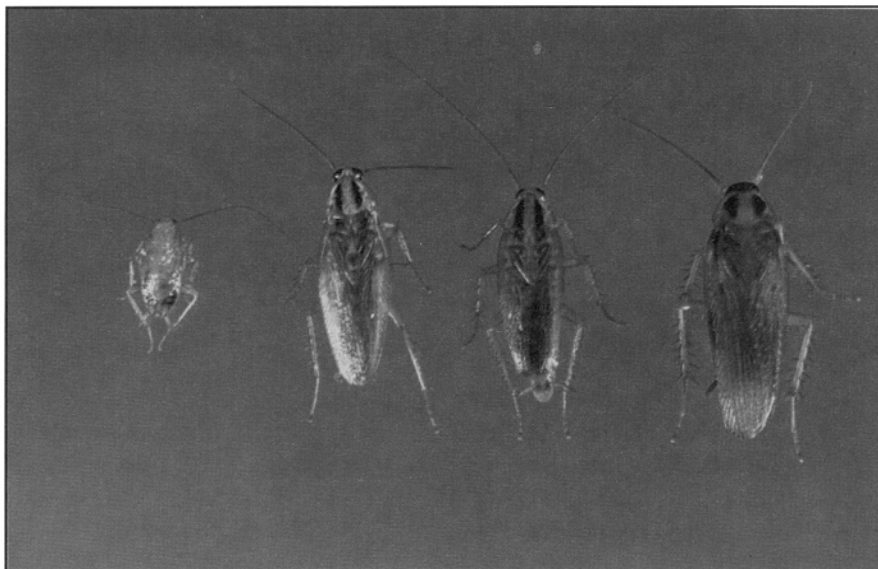
under indoor conditions. However, we have observed very high populations in lawns and plantings around houses which are adjacent to prime habitats. Population levels in these situations are high enough for the cockroaches to be noticed and considered pests by homeowners. In these cases, control would be justified.

Successful control requires correct identification of this species and appropriate action. No products have been tested specifically against the Nicaraguan cockroach, but treatment of the perimeter of homes (especially near doors and other entry points, and shrubbery and beds near the house and outdoor activity areas) with a residual spray or bait should be effective. Indoor treatments for German cockroaches will have no effect whatsoever on this species.

The Nicaraguan cockroach superficially resembles the German and Asian cockroaches,

Comparison of Small Cockroaches							
Cockroach Species	Length	Wings	Pronotal Spots	Color (Dorsal)	Color (Underside)	Flight	Habitat
Caribbean	5-10 mm	shorter than body	none	yellow	same as dorsal	males only	grass, weeds
Asian	10-13 mm	cover body	narrow	ashy, grayish brown	same as dorsal	both sexes	grass, weeds
German	10-13 mm	cover body	narrow	honey brown	same as dorsal	no	indoors
Nicaraguan	15-18 mm	cover body	triangular	reddish brown	black	both sexes	grass, weeds

Figure 3. Comparison of small outdoor cockroaches of the Southeast and the German cockroach. Left to right, Caribbean cockroach (*Cariblatta mimina*), Asian cockroach (*Blattella asahinai*), German cockroach (*Blattella germanica*), and Nicaraguan cockroach (*Ischnoptera begrothi*).



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but can easily be distinguished from other small cockroach species in the southeastern United States. In comparison with other species, it is slightly larger, chestnut brown rather than pale brown in dorsal view, and the underside of the body is black rather than brown.

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