

EPILAMPRA MAYA REHN, A CENTRAL AMERICAN
COCKROACH NEWLY ESTABLISHED IN
THE UNITED STATES
(BLATTODEA; BLABERIDAE; EPILAMPRINAE)

DAVID A. NICKLE

Systematic Entomology Laboratory, IIBIII, USDA
c/o U. S. National Museum of Natural History
Washington, DC 20560 USA

AND

BRUCE W. SIBSON

Rentokil Incorporated, Pest & Termite Control
4360 Peters Road, P.O. Box 17590
Plantation, FL 33318 USA

With the exceptions of the native species *Parcoblatta pensylvanica* (De Geer) and *Eurycotus floridana* (Walker), which are minor pests locally, all species of pest cockroaches in the United States have been introduced through international commerce. In fact, the most economically destructive species—*Periplaneta americana* (L.), *Blatta orientalis* L., *Blattella germanica* (L.), and *Supella longipalpa* (F.)—have become nearly worldwide in distribution through commerce. Because of the potential for newly introduced species to become pests, strong measures are taken to ensure against unwanted introductions, including laws to restrict the transport of plants and animals across international borders. In spite of such precautions, however, foreign species of insects manage to enter this country. Recently, 2 species of cockroaches, *Ectobius sylvestris* (Poda) (Hoebeke and Nickle 1981) and *Blatta lateralis* Walker (Gurney 1978), were reported as newly established. One of these, *B. lateralis*, has already become a pest problem in El Paso, Texas and San Francisco, California (Spencer et al. 1979). We report here the probable introduction of yet another foreign species of cockroach, *Epilampra maya* Rehn.

On 30 August 1982 2 adult cockroaches were collected by Wes Young, Branch Manager, and Bruce Sibson, Technical Manager of Rentokil Inc. The specimens were forwarded for positive identification to David Nickle, Systematic Entomology Laboratory, IIBIII, USDA. Young had noticed the cockroaches during a routine inspection for wood infesting insects of a home in Arcadia, De Soto County, Florida. He found live adults outside the house, under the roof overhang, and in the carport. Additional live cockroaches and fecal droppings were located indoors in the kitchen and storage areas.

A second site inspection by Young and Sibson on 19 October 1982 uncovered several dead specimens under the perimeter of the roof overhangs. Access to the interior of the house for inspection was not available. However, the resident next-door reported frequent indoor sightings of this species in his house over the past 2 years. Although no specimens were found in his house, live males, females, and 3 different stages of nymphs were collected in the area surrounding his house. The specimens were collected along the bank of the slow moving stream bordering his property and were found beneath the soil surface and in leaf litter and humus. All stages were

fast-moving.

Subsequent to this discovery, another specimen was collected by Rentokil staff outside of a house at least a half-mile from the original site. We regard the distribution, the range of time of discoveries, and the presence of both sexes in several stages of development as strong evidence of establishment of this species in Florida. Because *Epilampra maya* is essentially a tropical species, it is unlikely to extend its distribution beyond peninsular Florida, but its presence in homes suggests future local pest problems.

Specimens collected from the first site have been deposited at the Florida State Collection of Arthropods, Division of Plant Industry, Gainesville, Florida (1 ♂, 2 ♀♀) and at the U. S. National Museum of Natural History, Washington, D. C. (2 ♂♂, 3 ♀♀).

Epilampra maya has been intercepted several times in the United States, usually in association with shipments of tropical fruits such as bananas at northern ports of entry. Hebard (1917) reported individuals found in Vermont, Massachusetts, and New Jersey. It is not likely the species could have survived a winter in these areas.

Several species have been confused with *E. maya*, most notably *E. abdomennigrum* (De Geer). Roth and Gurney (1969) established that *E. abdomennigrum* is restricted to South America, Trinidad, Grenada, and St. Lucia. Roth (1970) reported additional specimens of *E. abdomennigrum* from Puerto Rico. On the other hand, *E. maya* is a common species in Mexico and Central America. Both nymphs and adults of these species are reported to be good swimmers and are often found in or near aquatic habitats (Sein 1923, Crowell 1946). The species are separated from each other on the basis of tegminal color patterns, color pattern of the male supra-anal plate, and internal male genitalia. The left paraprocts of specimens from Florida resemble most closely those of *E. maya* populations from Costa Rica (see Fig. 137, Roth and Gurney 1969).

Epilampra maya is slightly larger and more robust than *Parcoblatta* species. Both sexes are fully alate. The color is a uniform dark tan, mottled with cinnamon red or brown flecks on the pronotum and tegmina. The color patterns of the tegmina and male supra-anal plate of the Florida specimens are identical with the figures depicting *E. maya* in Roth and Gurney (1969). In Helfer's (1963) key to cockroaches in the United States *E. maya* keys out to couplet 10a, but may be distinguished from *Phaetalia pallidus* (Brunner) by the color of the pronotum, which in *E. maya* is the same as the tegmina, while in *P. pallidus* it is darkly pigmented.

We do not know the mode of introduction of this species. Arcadia, Florida is a relatively isolated town in De Soto County, a sparsely populated county southeast of Tampa.

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