

## INVASIVE TERMITES (ISOPTERA: RHINOTERMITIDAE, KALOTERMITIDAE) IN THE EASTERN UNITED STATES

<sup>1</sup>SUSAN C. JONES, <sup>2</sup>TRACIE M. JENKINS AND <sup>3</sup>BRIAN T. FORSCHLER

<sup>1</sup>Department of Entomology, Extension Entomology Building, 1991 Kenny Road,  
The Ohio State University, Columbus, OH 43210-1000, USA

<sup>2</sup>Department of Entomology, 1109 Experiment Street, The University of Georgia, Griffin, GA 30223, USA

<sup>3</sup>Department of Entomology, 413 Biological Sciences, The University of Georgia, Athens, GA 30602, USA

**Abstract** The introduction of termites into new areas is a potential threat given the magnitude of national and international commerce. We review a number of case studies that document exotic termites in the eastern U.S., with emphasis on two states, Ohio and Georgia. We discuss the value of employing a multidisciplinary approach for termite identification that entails genetic analyses in conjunction with characterization of soldier and alate morphological features. During the course of a statewide survey of termites in Ohio, pest management industry collaborators submitted hundreds of termite samples, some of which were identified as non-native species. International transport of termites was evidenced by *Coptotermes* sp. (Rhinotermitidae) that originated in Singapore and by *Incisitermes* sp. (Kalotermitidae) from Mexico. Interstate movement of termites also was evident. A structural infestation of *Incisitermes minor* (Hagen), a drywood termite that is native to the southwestern U.S., was recorded in the Cincinnati metropolitan area (southern Ohio). In metropolitan Atlanta, Georgia, DNA marker technology demonstrated that infestations of *Coptotermes formosanus* Shiraki were the result of a point source introduction that likely originated in New Orleans, Louisiana. The Formosan subterranean termite apparently was transported in weathered railroad ties that subsequently were used for landscape borders. Further movement of this species in Georgia currently is being tracked and monitored. The knowledge of how termites are coming into the United States as well as how they are being moved about the states can be invaluable for managing pest species.