

***HETEROTERMES CONVEXINOTATUS* (ISOPTERA: RHINOTERMITIDAE) IN COLOMBIA: DISTRIBUTION AND IMPACT**

**¹JUAN CARLOS ABADÍA, ²CARLOS EDUARDO GALVIS,
³ÁNGELA MARÍA ARCILA, AND ¹PATRICIA CHACÓN DE ULLOA**

¹ Facultad de Ciencias Naturales y Exactas, Departamento de Biología, Universidad del Valle, A.A. 25360,
Cali, Colombia

e-mail: furcio882@gmail.com

²Preservación Maderas de Colombia, Cali, Colombia.

³Corporación Colombiana de Investigación Agropecuaria CORPOICA, Caribia, Magdalena, Colombia.

Heterotermes convexinotatus (Snyder 1924) belongs to the group of subterranean termites, it is regarded as an important pest in passion fruit and corn crops in Venezuela and Colombia, it has also been found in Citrus orchards at the Caribbean coast of Colombia. In urban zones it had only been reported in Caracas (Venezuela). The present research reports the presence of *H. convexinotatus* at several regions of Colombia and warns about the serious damages caused by this species at structural level. In the Caribbean region, have been detected at households in the touristic area El Rodadero (11°11'47.4"N, 74°13'28.2"W, 2 m above sea level), in the vicinity of Santa Marta, Magdalena; it also occurs at the frontier town of Paraguachón (11°20' N, 72°7' W, 50 m), near Venezuela, Guajira. At the northeastern Andean region of Colombia *H. convexinotatus* is very common in Cúcuta (7°54'N, 72°30'W; 320 m), Norte de Santander, also located near the national border with Venezuela. At the Pacific region, in the interandean valley of Cauca river, *Cryptotermes brevis* and *H. convexinotatus* are the most frequent species found in the city of Cali (3°27'N, 76°32'W; 1000 m), Valle del Cauca. These subterranean termites are a serious problem and their presence is usually evident only when the infestation has reached a high level. The damage is indicated by the thin foraging mud tunnels that spread through the walls and ceilings leading towards closets, furniture, wooden structures, paper and other cellulosic materials. Their feeding and nesting behaviour compromises the structural integrity of infested households, which is even more serious in an area with high seismic activity, risking human and economic losses. In city parks and green zones the presence of *H. convexinotatus* causes damages to ornamental trees and accelerates their decomposition rate. The expansion success of this species is enhanced by human related transportation of infested materials between cities and borders. Integrated pest management strategies such as chemical barriers, toxic baits and gasification are used in Colombia to control this species. Nonetheless it is recommended that wooden materials used for construction are treated with termiticide substances and is urgent to create legislation for pre-construction treatment. Finally it is necessary to monitor the presence of the species in other regions of the country. All termite samples mentioned in this work are deposited at the Entomology Museum of Universidad del Valle (MUSENUV) in Cali.

Key Words Crop, integrated pest management, urban area, wood