

Report

Eastern Subterranean Termite (*Reticulitermes flavipes*) Found Damaging Sweetpotato (*Ipomoea batatas*) in Mississippi

Fleming, D. E.

Department of Entomology and Plant Pathology, Mississippi State University, Box 9775, Mississippi State, MS 39762, def18@msstate.edu

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Background and Observations

Sweetpotatoes in Mississippi are attacked by a variety of insect pests. Termites (Isoptera) are not considered a pest of sweetpotatoes in the United States, and to the author's knowledge have never been documented to cause injury to sweetpotatoes in this country. However, a small colony (~25 workers and three soldiers) of the eastern subterranean termite (*Reticulitermes flavipes* Kollar) (Figure 1) was found in one root from a commercial sweetpotato field on 8 September 2008. The field was located in Chickasaw County, Mississippi near the town of Houlika. Termites are structural pests in Mississippi and normally feed on wood or wood products. Termites have been noted as pests in Ugandan, Australian, and Nigerian sweetpotato fields (Black and Okwakol 1997; Nyeko and Olubayo 2005; Traynor 2005), especially those fields that have been "recently cleared." The damage shown in Traynor's (2005) pictures of Australian sweetpotatoes appears similar to the damage the author observed in the Mississippi sweetpotatoes. There was extensive tunneling throughout the sweetpotato root (Figure 2).



Figure 1. Soldier and worker eastern subterranean termite from sweetpotato root.



Figure 2. Tunneling by eastern subterranean termites in sweetpotato root.

It is possible that a queen termite looking for a new place to colonize could not find a suitable food source and chose a sweetpotato root. It is more likely that wood debris in this field, which was recently cleared of trees, served as a food source for the termites. As the wood rotted and became unsuitable, the termites began feeding on the closest food source they could find, a sweetpotato (Layton 2008). The latter reason is likely to be the case because rotting pieces of wood were found in the field (D.E. Fleming, personal observation). Though the occurrence of termites feeding on sweetpotatoes in the United States has never been reported, they have occasionally been seen infesting sugarcane, peanuts, and many other crops (Layton 2008). This finding documents damage to sweetpotato root by termites in the United States, and suggests a potential for damage to sweetpotato roots by termites in fields containing woody debris.

References

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