

OR082*Termite baits for management of structural infestations of Reticulitermes flavipes***Susan Jones**

The eastern subterranean termite, *Reticulitermes flavipes*, is the most economically important, widely dispersed native species in the United States. It is a common pest in homes, since wood is a dominant structural element. As discussed in this presentation, studies of bait effectiveness in infested homes in Ohio have demonstrated that a number of bait systems can provide structural protection, often within a matter of months once termites begin feeding on the active ingredient. In addition to effectiveness of the active ingredient in the bait itself, refining bait placement is an important consideration, particularly since one or more colonies may be associated with a structure. Furthermore, a moisture meter is a useful tool to position aboveground bait stations since areas of 18 to 20% or more moisture often are indicators of potential termite activity in a structure. This capitalizes on our knowledge of termites' ability to relocate free water to dry resources. Hence, it is important to investigate underlying biological and ecological mechanisms that enable termites to exploit their environment, with the ultimate goal of developing new and improved termite detection and control procedures.