Insects as Potential Vectors of Hypovirulent *Endothia parasitica* Strains

RUSSIN, John S.
University of Kentucky
Department of Plant Pathology
Lexington, Kentucky 40506

A survey of insects that may serve as potential vectors of hypovirulent *Endothia parasitica* strains was conducted from April to October 1979. Insects were sampled from bark of healthy, infected and dead American chestnut *(Castanea dentate)* stems and from additional tree species frequently found in association with chestnut. The major sampling method used involved tanglefoot-coated fiberglass screening affixed to diseased or healthy bark of the host tree. These screen traps were removed and replaced biweekly. Results indicate that the habituating insect fauna of American chestnut is mostly confined to two orders, Coleoptera and Diptera. The major coleopteran families include Eucnemidae, Scolytidae, Bostrichidae, and Staphylinidae, while Sciaridae, Phoridae, and Dolichopodidae were the major dipteran families. Differences were observed in species diversity and total number of insects collected between the types of host; dead infected stems attracted the most and healthy stems attracted the least numbers of insects and insect species. Other hardwood species similarly sampled show a somewhat different insect fauna.