

ANTS AS VECTORS OF ENDOTHIA PARASITICA

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ABSTRACT.--Various agar media, namely, chestnut bark, tannic acid (0.5, 1.0, and 2.0 percent), pentachloronitrobenzene (PCNB) (10 and 50 ppm), and potato dextrose agar were compared for selective isolation of *Endothia parasitica* with 0.5 percent tannic acid agar giving best results and utility. Ants collected from cankered and uninfected scarlet oak and Chinese chestnut trees under varying weather conditions were plated on the medium. To date, the fungus has been isolated from *Aphaenogaster lamellidens* in greatest frequency and inoculum yield following the rain. Only collections from infected scarlet oak have been positive so far. Presently, mode of transmission is being studied by caging ants infested with *E. parasitica* in fresh wounds on scarlet oak and Chinese chestnut. Screening of host-associated ant populations for vector quantification will be continued. By exposing them to hypovirulent-strain inoculum, attempts will be made to obtain conversion of virulent-strain cankers on Chinese chestnut by field caging experiments.