Mixtures of Hypovirulent Strains of Endothia parasitica: Their Pathogenicity and Ability to Control Cankers on American Chestnut

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Pathogenicities of normal and hypovirulent strains of Endothia parasitica are highly variable and strain dependent. Pathogenicity of hypovirulent strains decreases dramatically when two or more are mixed. This is probably due to superinfection with different hypovirulence factors and the cell death which results from the interaction of hyphae from members of different vegetative compatibility groups. Mixtures of different hypovirulent mycelia effectively overcame vegetative incompatibility and rapidly arrested canker development. However, mixtures tested to date may be too debilitated to survive and disperse themselves in the wild.