

Section 1 Abstracts: Molecular Biology of Hypovirulence

Isolation and Transmission of dsRNA from Chinese *Endothia parasitica* and Homology of dsRNA Among Chinese, European and U.S. Strains. Pingyan Liang, Kaiying Chen, Shumin Chou and Yong Quan, Institute of Microbiology, Academia Sinica, Beijing 100080, CHINA

One-hundred-sixty strains of the chestnut blight fungus (*Endothia parasitica*) were isolated from natural cankers on Chinese chestnut trees (*Castanea mollissima*) in southern, northern and eastern China. Their virulence to chestnut trees was tested, and the dsRNA from these fungi was characterized by electrophoresis. Two less virulent (H) strains reduced the rate of expansion of one V strain canker when the H strains were co-inoculated with the V strain. Electrophoretic analysis of the dsRNA revealed that both Chinese H strains and European H strains contain dsRNA with a molecular weight about 5 to 6×10^6 d.

Results from dot-blot hybridization using dsRNA from Chinese H strain EPc32 and European H strain 713 as probes suggest that the dsRNA from the Chinese H strain is homologous to that of the European H strains 713 and 748, but not to that of U.S. strains 915 and 868. This may provide new evidence for the possible origins or relations of strains of the chestnut blight fungus from different geographic locations.