

d. Natural Occurrences of Virulent
and Hypovirulent Strains in the
United States

Abnormal Strains of *Endothia para-*
sitica Associated with Large Sur-
viving American Chestnut Trees

JAYNES, Richard A.
Connecticut Agricultural Experiment
Station
P.O. Box 1106
New Haven, Connecticut 06504

Endothia parasitica have been isolated from 20 large (mostly 12-inch dbh or more) surviving American chestnut trees in seven states. Abnormal isolates have been selected from these trees. Many are hypovirulent in the sense that they are less pathogenic than normal strains when tested on excised and in *situ* American chestnut stems, and they contain dsRNA. The evidence leads us to believe that many of these surviving trees are not genetically resistant but owe their survival to being infected with abnormal (hypovirulent) strains of *Endothia parasitica*.