Endothia Canker Survey of Chestnut and Oaks in the Mountain Counties of North Carolina

NASH, Bruce
Duke University
School of Forestry and Environmental Studies
Durham, North Carolina 27706

Sample plots (6 for each of 21 North Carolina counties) were randomly selected using the grid system on county maps. On location, each plot was divided into five scatter plots, according to U.S. Forest Service survey methods. Within each scatter plot, data were obtained pertaining to species composition, tree measurements, and characterization of all *Endothia* infections; appropriate symptom and sign material was collected for laboratory isolations. To supplement the *Endothia* isolates thus obtained, additional symptomatic trees were sampled at approximately 10-mile intervals along the Blue Ridge Parkway in North Carolina. The data will be computerized, and isolates (267 to date) will be characterized as to vegetative compatibility group and virulence.

Preliminary results show that 72 of the 126 plots contained scarlet oak, of which 8.4 percent were infected with *Endothia parasitica.* American chestnut was present in 36 of the 126 plots with approximately 28.5 percent infection. A total of 407 scarlet oaks and 789 chestnut stems or sprout clumps were examined in this mountain sample.