

FINAL REPORT

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TACF Progress Report (2011)

Maintaining a backcross orchard planting to assess the integration of host resistance and hypovirulence

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Six replicate plots, each containing 150 trees, were established at the Plant and Soil Sciences Farm in Morgantown, WV in the spring of 2005 to assess the interaction of host resistance and virulent/hypovirulent strains of *Cryphonectria parasitica*. Initial establishment problems arose principally because of raccoon predation. Since then, fencing has been placed around all 900 planting sites and partial replanting of dead/missing nuts has been conducted annually (2006-2010). Seedlings survived as of August 2010, is listed in the following table.

Species	Percent Survival
American	71%
Backcross	80%
Chinese	91%
European	46%

Low survival of Europeans is the result of poor seed quality.

Monies from the grant have supported: student labor; fertilizer; mulch; and; herbicides.