

FOREWORD

The American chestnut was an important tree in the history of the United States. The fruit of chestnut was not only important to man and his domesticated animals but to the wildlife of the eastern forests. The tree comprised over 25 percent of the eastern hardwood forest and its natural range included at least 200 million acres. On good sites, the tree often grew 1 inch in diameter each year, faster than any of its associated hardwoods. Its ability to grow on poorer sites and produce a straight, clear bole made it an even more valuable species. Chestnut timber was of superior quality and durability having been used for fence posts, rails, furniture, paneling, and construction. Nowhere in the eastern forests is there as much public sentiment for a tree as in the Appalachian region where the value of the chestnut will long be remembered.

Recently there has been considerable renewed interest and optimism for the American chestnut tree. In Europe, the chestnut trees are recovering from chestnut blight. European researchers believe that hypovirulence, less virulent strains of the chestnut blight, is the explanation for this recovery. In the United States, hypovirulence has the potential to biologically control this disease, but there are many problems to solve and characteristics to be understood before hypovirulence can realistically be used as a means to allow the American chestnut tree to survive.

In January 1978, an American Chestnut Symposium was held in Morgantown, West Virginia. The Forest Service held its first cooperators' meeting at Pipestem, West Virginia in January 1980. Papers and abstracts of talks given at both meetings were published. During January 1982, a second Forest Service cooperator meeting was held at Morgantown, West Virginia. All cooperators funded by the Forest Service summarized the status of their research programs, including what they are doing, what they have found out, what problems have occurred, and future plans. The second aspect of the meeting involved specific research reports by many of the participants including research not funded by the Forest Service conducted at the Connecticut Agricultural Experiment Station, Michigan State University, and Western Michigan University. A third portion of the meeting involved a group discussion of the current status of five selected research topics relating to hypovirulence. Before each discussion, a discussion leader presented a state-of-the-art paper summarizing available, pertinent information. The discussion topics were vegetative compatibility, cultural studies, host-parasite interactions, molecular aspects, and dissemination of hypovirulence. Following the discussion topics, David Houston led a group discussion in an effort to establish priorities for the chestnut blight research program.

Through cooperative efforts of groups such as the universities, state and federal agencies, researchers hope to solve the mystery of the chestnut blight and provide ways for the American chestnut tree to regain some of its importance in the eastern hardwood forest.

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