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Natural Blight Resistance in American Chestnut: Breeding Programs

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## Abstract:

One of America's most famous and beautiful trees, the American chestnut (*Castanea dentata*), has been wiped out of America's eastern deciduous forests over the past hundred years due to the effects of an Asian parasite *Cryphonectria parasitica*. This fungal parasite destroyed entire forests of the chestnut in less than 60 years due to a lack of resistance to it on the part of the chestnut. In order to incorporate natural resistance into American chestnut, trees having some natural resistance are bred with Chinese chestnuts to produce a chestnut that looks American, but with the resistant capacities of *Castanea mollissima*. According to the data available in the literature, each generation, if bred correctly, results in an increasingly resistant species of chestnut. These chestnuts, even though mostly American chestnut in morphology, are closer to *C. mollissima* in terms of resistance.

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