

due largely to the Hoagland's solution which is 100% nitrate nitrogen and pH rises with NO₃ fertility.

Summary and Conclusions

Gypsum appears to have potential for alleviating soil-salt damage to landscape plants. A broader spectrum of plants must be screened and a more definitive range of gypsum concentrations should be examined. Soil and plant tissue analyses are needed to corroborate the observed beneficial effects. All sources of gypsum, when incorporated, were effective. The Sof'n-Soil (fine) is difficult to work with. The granular forms are recommended.

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ABSTRACT

ANAGNOSTAKIS, S.L. 1978. **The American chestnut: new hope for a fallen giant.** Conn. Agr. Expt. Sta. Bul. 777. 9 p.

The American chestnut (*Castanea dentata*) was once the most important hardwood species in the Eastern United States. The blight fungus (*Endothia parasitica*), was responsible for its loss. The canker disease was first reported on American chestnut trees in the Bronx Zoological Park in 1906. When the seriousness of the disease became evident, much money and effort went into a campaign to save the chestnut. Within 40 years the blight fungus had decimated every major stand of American chestnut in the eastern United States. In Connecticut, a chestnut breeding program was begun in 1931. Progress has been made, but we are still a long way from producing true breeding forest trees. Europeans have isolated forms of the blight fungus that have reduced virulence. We know that: 1) hypovirulence is a disease or group of diseases of the fungus *E. parasitica* that reduces its pathogenicity but not its vigor as a saprophyte, 2) it is controlled by genetic determinants in the cytoplasm of the fungus, 3) the determinants are probably on, or associated with, dsRNA, 4) all hypovirulent strains examined contained dsRNA, and 5) the dsRNA is associated with club-shaped virus-like particles in at least one strain.