



Forest Health Protection, Southern Region

CHESTNUT BLIGHT,

caused by *Endothia parasitica*

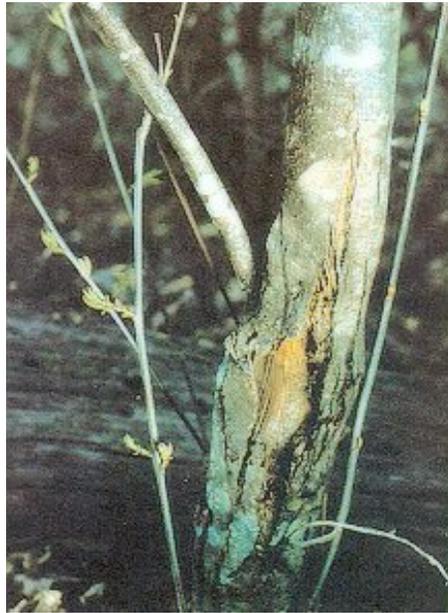
Importance. - The chestnut blight fungus has virtually eliminated the American chestnut, as a commercial species, from eastern hardwood forests. Although roots from trees cut or killed many years ago continue to produce sprouts that survive to the sapling stage before being killed, there is no indication that a cure for this disease will be found. The fungus is widespread and continues to survive as a nonlethal parasite on chinkapin, Spanish chestnut, and post oak.

Identifying the Fungus. - The fungus forms yellowish or orange fruiting bodies (pycnidia) about the size of a pin head on the older portion of cankers. Spores may exude from the pycnidia as orange, curled horns during moist weather.

Identifying the Injury. - Stem cankers are either swollen or sunken, and the sunken type may be grown over with bark. The bark covering swollen cankers is usually loose at the ends of the canker. Trees die back above the canker and may sprout below it. Frass and webs from secondary insects are common under loose bark.



Cracking and fruiting bodies on chestnut.



Basal cracking caused by chestnut blight fungus.

Biology. - Host infection occurs when fresh wounds in the bark become infected with spores that are disseminated by wind, birds, rain, and insects. Cankers kill the cambium and girdle the stem. Multiple cankers on infected trees are common.

Control. - No effective control has been developed for chestnut blight, even after decades of intensive research. Current research is targeted toward finding a blight-resistant species and the further development of the hypovirulent strains of the fungus. These strains tend to inactivate the pathogen and promote healing, but only when applied directly to developing cankers.
