STUDY OF CHEMICAL CONTROL OPTIONS AGAINST CHESTNUT BLIGHT DISEASE

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Cryphonectria parasitica, the causal agent of chestnut blight, is a destructive Ascomycota fungal disease infecting European chestnut (*Castanea sativa*) and American chestnut (*Castanea dentata*) trees. On susceptible host trees, necrotic lesions (cancers) are caused by the disease on the bark of the trunk and branches. The disease leads to wilting and destruction of the chestnut trees.
Protection against the pathogen is difficult. Biological control using hypovirulent strains of the pathogen is a good option, but its implementation requires a lot of preliminary testing, as well as compatibility between the virulent pathogen strain that infects the area and the hypovirulent strain used for treatment. Thus, this procedure is a rather complicated and slow process. Chemical control against the pathogen is not currently widespread, as its implementation is also difficult due to the large size of the trees and the nature of the forest-like plantations, and there are currently no available pesticides. At the same time, protection with chemical pesticides may be feasible in plantations in which the size of the trees allows for application (lower-sized trees or young plantations). Therefore, it is necessary to find fungicides that can be used effectively, which is the purpose of this experiment. *In vitro* efficacy of four chemical pesticides (Pictor, Amistar Sun, Score, Cuproxat) has been tested against *Cryphonectria parasitica*. Score and Amistar Sun were the most effective fungicides, given that they inhibited fungal growth even at the lowest concentrations of the test solution.