

A COMPARATIVE STUDY OF TWO ISOLATES OF COLLETOTRICHUM GLOEOSPORIOIDES PENZ. FROM RUBBER (HEVEA BRASILIENSIS MUELL.-ARG.)

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Colletotrichum gloeosporioides is the causative agent of the Colletotrichum leaf disease of rubber. Several isolates of the pathogen have been collected from different rubber growing localities and variability in morphology, growth pattern and infectivity are known to occur among the different isolates.

Two isolates (Isolate I and Isolate V) were selected for this study. Isolate V is known to be more virulent than Isolate I. The pattern of growth of the two isolates and their ability to secrete host cell wall degrading enzymes were investigated.

There were marked differences in growth pattern and sporulation between the two isolates. Isolate V had a rapid rate of growth when grown on Potato Dextrose Agar plates at 30°C but sporulation was greater in Isolate I.

Both isolates when grown in suitable liquid media secreted the pectolytic enzymes, polygalacturonase and pectin lyase, and the cellulolytic enzymes, cellobiase and β .1-4.glucanase. The levels of enzymes were higher in Isolate V.

This study shows the existence of variations between the two isolates.

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