

ABSTRACT

SCREENING YAM CULTIVARS (DIOSCOREA spp.) FOR RESISTANCE TO ANTHRACNOSE DISEASE (COLLETOTRICHUM GLOEOSPORIODES PENZ.)

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This study evaluated the resistance of ten (10) cultivars of yam (Dioscorea spp.) to infection by the fungus Colletotrichum gloeosporioides which causes anthracnose disease of yams. Of the ten (10) cultivars screened, the four (4) Dioscorea alata cultivars were susceptible, Dioscorea alata White Lisbon being the most susceptible. Dioscorea esculenta var Pana, Dioscorea rotundata var Eboo and Dioscorea rotundata var Negro appeared to be resistant. The young leaves and vines of Dioscorea esculenta var Chinese exhibited moderate resistance and the vines of Dioscorea cayenensis var Afou seemed susceptible when wounded. The young wounded leaves, and wounded and unwounded vines of Dioscorea cayenensis var Yam-a-tout-temps showed moderate resistance. Mature leaves of all cultivars showed resistance during the period of the study.

Wounded organs proved to be more vulnerable to attack by the pathogen than unwounded ones. No definite results were obtained from tubers of the ten varieties treated with conidia of Colletotrichum gloeosporioides as a result of the presence of other saprophytic fungi. Areas for further investigations are suggested.