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Incidence of Pathogenic Fungal Species Associated with Sweet Potato Tubers (Ipomoea batatas Lam) in Gwandu Local Government

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ABSTRACT

Sweet potatoes have become an increasing popular food source in Kebbi State due to its nutritional benefits, medicinal value, and economic importance. Fungal species plays a pivotal role in declineit production and promoting food insecurity of this tuber crop. This research is aimed for isolating and identifying fungi associated with sweet potato tubers (Ipomoea batatas Lam) using needle mount method. The pathogenicity studies revealed the incidence of three fungal species: Rhizopus oryzae, which produced the highest virulence zone (73 mm), while Aspergillus niger and Alternaria spp. each produced 13.5 mm virulence zones.The rotten tissues yielded an identical fungus with the original fungus inoculated. Isolated fungal species causes significant losses of sweet potato tubers both before and after harvest. Hence, there is a need to develop alternative disease control methods using plants that may be effective against the isolated species.

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