

CHARACTERIZATION OF *CARICA PAPAYA* SEEDLINGS PATHOGENS IN KAMIU TREE NURSERIES AT EMBU COUNTY

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ABSTRACT

Papaya (*Carica papaya* L.) is an important fruit crop cultivated in many parts of the world. Its cultivation happens in different stages; from seeds, to seedling and finally to a grown papaya crop. Papaya crop in its seedling stage is highly infested by fungus and also bacterial diseases, mostly on leaves, causing the seedling to dry up and die. This causes huge economic losses to farmers cultivating papaya crop seedlings in tree nurseries for sale and also commercial losses since the papaya fruits have commercial benefits. The aim of the study was to characterize *Carica papaya* tree seedlings pathogens in Kamiu tree nurseries. Infected leaf samples were collected from papaya trees for pathogen isolation and characterization using morphological and molecular techniques. The results reported bacteria obtained from the isolates S1 ISOL1-S3 ISOL2 was confirmed as *Erwinia* spp. The isolated fungi were confirmed S ISOL1 as *Penicillium* spp, S ISOL2 as *Corynespora* spp and S ISOL3 as *Phytophthora* spp.

Key words: *Carica papaya*, pathogens, tree nurseries, *Erwinia* spp, *Penicillium* spp, *Phytophthora* spp