

Effect of *Lantana camara* on prevention of cut tuber decay in Potato and its anti-microbial properties

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Lantana camara (Family: Verbeceae) is a native of West Indies and introduced to Sri Lanka as an ornamental plant. It has become one of the most widely spread weed in this country. This plant contains an unidentified chemical called "Lantanine" and it was already reported that the lantanine has an anti-microbial property.

Laboratory experiments were carried out to study the effect of *Lantana camara* leaves in controlling bacteria and fungi infection with this view of using this leaves to prevent cut tuber decay in potato when cut tubers are used as planting material.

Results obtained from this experiment reveals that fungus growth in PDA media was found within 24 hours in the media treated with leaf extract and leaf residue of water and ethanol. But in the leaf extract of ether, the fungal growth was observed only after 48 hours of inoculation. In the bacterial inoculated plates of Nutrient Agar, the bacterial growth was observed both in the waterleaf extract and residue within 24 hours of inoculation. Same observation was also noticed in the ethanol and ether extract and not in the residue. In the residue of ether and ethanol bacterial growth was not observed up to 14 days. In an experiment where the potato cut tuber were covered with *Lantana camara* leaves and buried in the soil, cut tuber decay was not found up to 45 days. These conclude that the *Lantana camara* leaves could be used to prevent cut tuber decay when cut tuber of potato are used for planting purpose.