**B-98: Crown rot of banana and its control**

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The fungal colonization at the exposed crown tissue of dehanded bananas, referred to as crown rot, is a common problem in the domestic and export market. A survey conducted in 1992-1993 in Kandy showed that about 32% dehanded bananas develop crown rot during market storage. Among the popular varieties "Ambun" recorded the highest incidence (44.4%) while "Ambul" (8.8%) showed comparatively less disease incidence. Crown rot was not observed in "Kolikuttu". The crown rot initiates at the exposed crown tissue and progresses into the deeper layers and finally to the finger stalks. Rarely, the pathogens infect the main stalk of the bunch first and later colonize the crown. *Fusarium* sp., *Colletotrichum musae* and *Verticillium theobromae* were the most predominant fungi observed. *Botryodiplodia theobromae* and several other fungi were also occasionally found associated with diseased crowns. Freshly exposed crown tissue artificially inoculated with *Fusarium* sp. and *C. musae* together developed crown rot within 2-3 days.

Control of crown rot was attempted by application of water soluble fraction of papaya latex. Papaya latex digested conidia of *Fusarium* sp and *C. musae* within 20 min. of exposure. Application of water soluble fraction of papaya latex to the banana crowns pre-inoculated with conidia of *Fusarium* sp. and *C. musae* prevented crown rot development completely. The latex-treated crowns developed a black coloration, but the tissue remained hard.

Addition of banana latex into the water soluble fraction of papaya latex resulted in coagulation of its proteins and loss of proteolytic activity. The factor responsible for this appeared to be a polymeric carbohydrate in the banana latex. The freshly cut crown tissue should therefore be devoid of banana latex for effective treatment with papaya latex.