

Disinfection of cutting implements to prevent transmission of bacterial diseases of sugarcane

Important bacterial diseases of sugarcane such as leaf scald, gumming and ratoon stunt are readily transmitted by implements that are used to cut the stalk, such as cane knives and harvesters. Transmission can therefore occur while preparing cane cuttings, leading to infection within nursery plots and newly planted fields. It can also occur while cane is harvested manually or mechanically. Ratoon stunt can remain unnoticed as its symptoms are not easily recognisable. To minimize the spread of bacterial diseases, knives and harvester blades should be disinfected during the preparation of cuttings and during the harvesting of cane.

Preparation of cuttings

Disinfection of knives for the preparation of cuttings is to be carried out by immersion in an iodine-based disinfectant, for example, Mikrolene at 250 ppm or in 70% denatured alcohol (methylated spirit). A fresh solution of the disinfectant must be prepared daily. Accumulation of dirt and cane debris in the solution should be kept to a minimum.

For the dipping of knives, the disinfectant should preferably be kept in a cylindrical container. Because of the corrosive nature of iodine-based chemicals, plastic containers are to be used which, at the same time, reduce the breakdown of the active ingredient. When applying methylated spirit, a hand sprayer can be used.

Harvest of fields

Disinfection of knives should be carried out as described above before the start of the harvest of a field, using 125 ppm iodine, and as and when required. Treatment of harvester blades can be effected with a sprayer. Particular precaution should be taken during the harvest of fields where diseases are present. Frequent disinfection would be necessary.

Other disinfectants, for example, sodium hypochlorite and quaternary ammonium compounds can also be used, as per the manufacturer's instructions.

Your attention is drawn to the fact that these guidelines and/or advices are restricted to the purpose for which they are recommended only.

MCIA Board shall not be responsible for any act that may arise outside the purview of these guidelines or advices.

