



MAURITIUS SUGAR INDUSTRY RESEARCH INSTITUTE

Recommendation Sheet

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A SINGLE FUNGICIDE TO CONTROL COMMON SCAB AND SILVER SCURF DISEASES OF POTATO

Common scab and silver scurf are two diseases that affect the skin of potato tubers. They influence quality but not yield.



Common scab

Common scab (caused by the bacterium *Streptomyces scabies*) appears as light brown to dark sunken lesions. The spots are generally circular and vary in size from 5 to 15 mm in diameter. The development of the disease is favoured by the plantation of infected tubers, amendments that increase soil pH, the use of scum as a soil conditioner and dry conditions during tuber initiation.

Symptoms of silver scurf caused by the fungus *Helminthosporium solani* include grey, irregular lesions that assume a silvery appearance. The affected part is initially small, but gradually enlarges to cover larger areas of the tuber. The disease is more clearly observed on washed potato and it increases in severity during storage at temperatures greater than 4 °C.



Silver scurf

Recommendation

A single seed treatment can be used to control both diseases with fungicide:

Octave Plus (25 g/kg prochloraz and 480 g/kg mancozeb) at 5 kg per tonne of seed.

It is an alternative to the separate use of Dithane M 45 and Octave DP against common scab and silver scurf respectively.

The following procedure should be used:

1. 10 kg of seed are placed in a large paper or plastic bag (such as a clean 50 kg polyethylene bag)
2. 50 g of Octave Plus are added on top of the tubers
3. The open end of the bag is folded to prevent escape of the fungicide
4. The bag is inverted 10 times to ensure a uniform coating on the tubers

Seeds that have undergone cool storage or that are physiologically old tend to sprout heavily. They should be treated before sprouts are 2 mm long as the method of treatment will cause the sprouts to break. In the case of young seed, damage to sprouts is less important as new and stronger ones will emerge.

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