



MAURITIUS SUGAR INDUSTRY RESEARCH INSTITUTE

Recommendation Sheet

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CONTROL OF SILVER SCURF AND COMMON SCAB DISEASES OF POTATO

Silver scurf disease of potato, caused by the fungus *Helminthosporium solani*, was reported for the first time on potato in Mauritius in the year 2000. The disease is found on potato tubers only, on which it causes grey irregular spots with a silvery appearance. Minute black fructifications of the fungus are also visible over the spots. Silver scurf has been reported on potato only.

The organism causing the disease is transmitted from the seed to the daughter tubers. Early symptoms in the field are usually difficult to observe. The disease then develops during storage (at temperatures higher than 4°C) and may cause the tubers to become wrinkled and sprouting is affected.

The transmission of the disease in the seeds and its development during storage can be controlled by dusting the tubers with Octave DP (containing 25 g/kg *prochloraz* as the active ingredient) as recommended below :

➤ **Dusting with Octave DP at the rate of 5 kg/tonne of seed**

Common scab disease of potato (MSIRI Recommendation Sheet No. 32, October 1985) is caused by *Streptomyces scabies*. The transmission of the disease can effectively be controlled by dusting tubers with Dithane M45 as recommended below:

➤ **Dusting with Dithane M45 at the rate of 3 kg/tonne of seed**

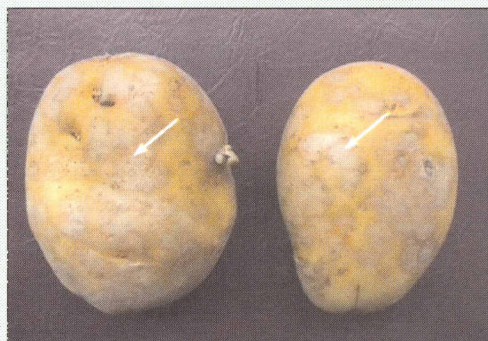
Method of combined treatment for silver scurf and common scab diseases before planting

The following procedure should be used:

1. 10 kg of seeds are placed in a large paper or plastic bag (such as a clean 50 kg capacity polyethylene bag)
2. 50 g of Octave DP and 30 g of Dithane M45 are mixed together and added on top of the tubers
3. The open end of the bag is folded to prevent escape of the fungicides
4. The bag is inverted 10 times to ensure a uniform coating on the tubers

This treatment will break most sprouts. Seeds that have undergone cool storage or physiologically old seeds that tend to sprout heavily should be treated before sprouts are 2 mm long. In the case of young seeds, damage to sprouts is not important as other strong ones will emerge.

Note: The organism causing common scab is present in most soils of Mauritius but the disease is severe only in fields in which the inoculum level is high or in which sand/lime has been applied, and when dry conditions prevail. Potato cultivation should be avoided in such fields. As it has been observed that factory scums favour the development of the common scab organism, growers are advised not to apply scums in potato furrows nor to plant on the very spots where scums have been piled prior to distribution in cane fields.



Arrows indicating silvery grey spots on infected tubers

