

MAURITIUS SUGAR INDUSTRY RESEARCH INSTITUTE

Recommendation Sheet

May 2003, No. 137

CONTROL OF EARLY BLIGHT OF POTATO USING **AZOXYSTROBIN (ORTIVA 25% SC)**

Early blight (caused by the fungus Alternaria solani) is an important disease of potato. It generally appears when the plant reaches maturity. The disease is favoured by alternating wet and dry periods and can be more severe when leaf miner infestation is present.

Symptoms of early blight become noticeable as small, circular dark brown spots, particularly on lower leaves.



Symptoms of early blight on the potato leaflets



Dark concentric rings typical of early blight

The spots enlarge to form lesions that can reach over 1 cm in diameter, and sometimes take an angular shape, being restricted by leaf veins. A series of dark concentric rings inside the lesion, itself surrounded by a narrow band of chlorotic tissue, are typical of the disease and distinguish it from late blight (*Phytophthora infestans*). Elongated brown or black lesions may also be formed on stems and petioles. If not controlled, disease-induced necrosis and senescence of leaves can occur. Although rare, tuber infection can appear as circular to irregular sunken spots.

Fungicide Ortiva 25% SC (azoxystrobin) has been found to be effective against early blight. It is a broad spectrum contact, systemic and translaminar fungicide, derived from a group of natural products. Ortiva 25% SC can be used as an alternative to Score 250 EC (difenoconazole).

Recommendations

Treatment Rate for full stand		
Either Ortiva 25% SC	240 ml/ha	100 ml/arp
Or Score 250 EC + Complement	(350 + 500) ml/ha	(150 + 210) ml/arp

- The recommended amount of product must be applied in sufficient water to ensure good foliage coverage.
- Treatment should start at the very onset of infection or preventively if visible signs of leaf mining are present and should be repeated fortnightly, until 14 days before harvest.
- Under conditions favourable to the disease or upon the appearance of patches of infection, spraying should be carried out weekly.

Note: As the pathogen survives in crop debris, it is necessary to destroy all the debris after harvest and practise crop rotation

This Recommendation Sheet supersedes No. 94 of April 1996 and supplements No. 103 of December 1997.

