SOUTH AFRICAN SUGARCANE RESEARCH INSTITUTE

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SOUR ROT

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Dry conditions favour the development of sour rot and should the current dry conditions persist, outbreaks of sour rot can be expected this year, particularly in those areas where cane is aged beyond 15 months.

Damage: Sour rot causes the internal tissue of infected stalks to rot, reducing purity (purities have dropped to 65% in the past) this may result in cane consignments being rejected by the mills. This disease can infect all varieties of cane.

Identifying sour rot: Stalks that are infected with sour rot are not always easy to identify, although the rind of some stalks may develop a mild "blush" or an orange-black discolouration. The internal tissue of infected stalks will be orange-brown and the stalks will have a sour odour.

Surveying for sour rot: It is important to survey your mature fields, targeting those in stress-prone areas and those that have previously developed sour rot. Surveys can be done by randomly collecting and slicing open 100 stalks per field. You can use the same stalks to check for eldana. Look for the typical orange-brown colour and detect the sour odour. Record the number of infected stalks in each field.

Harvesting: Rainfall may limit further development of the disease, but the internal damage will not disappear and affected fields should be flagged for early harvest. The level of eldana infestation will take precedence when making decisions on the time of harvest, but sour rot severity should be used to prioritise the harvest of other fields.



External symptoms of sour rot in mature cane.



Early stages of internal rotting, mild "blush" on the rind.



Severe internal rotting due to sour rot.