Information Sheet

2. DISEASES

2.7 Pineapple disease

Pineapple disease is caused by the soil inhabiting fungus *Ceratocystis paradoxa*. The importance of this disease is due to the poor germination that can occur when seedcane becomes infected after planting under unfavourable conditions for germination.

Symptoms

Setts infected by pineapple disease rot prematurely. The buds either fail to germinate or develop into weak shoots that may die back after emergence. The internal tissues are initially discoloured red and later have a sooty black appearance (Figure 1). Rotting setts have a characteristic fruity smell.

Conditions favouring pineapple disease

Pineapple disease is likely to be a problem whenever germination of the seedcane is delayed. Conditions which favour infection are:

- cool or cold soils
- dry soils
- waterlogged soils
- excessively deep planting.

All varieties may be affected but some, such as N17 and N19, are more susceptible than others. Varieties that tend to germinate slowly, such as N12, are also prone to infection by pineapple disease. Heat treated seedcane of all varieties is more susceptible than untreated seedcane.

Pineapple disease occurs most frequently in fields planted from the beginning of autumn until early spring in the Coastal Hinterland and Midlands. It can also be a problem in the northern areas in cane planted in winter that receives excessive irrigation after planting. The disease is rarely a problem in the main planting period of spring and summer.

Control measures

- Where possible, avoid planting under conditions when germination is likely to be slow.
- Apply either water or filtercake in the furrow when planting under dryland conditions in the cooler months.
- Avoid excessively deep planting.

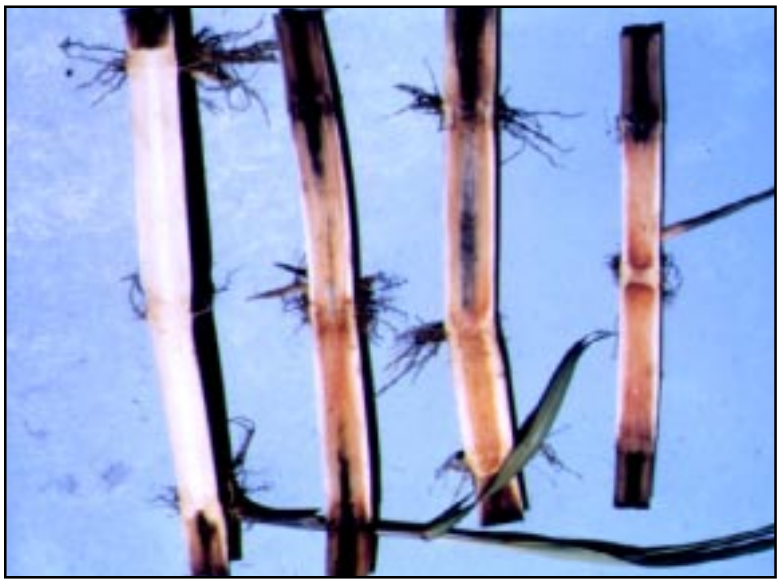

Figure 1. The rotting and poor germination of the three setts on the right was caused by pineapple disease. The rotting in the sett on the left was limited and germination was satisfactory.

- The use of a fungicide soak or spray gives some protection to the seedcane, if poor conditions for germination are anticipated. A seedcane soak (a short dip of up to five minutes) is more effective than spraying over the seedcane in the furrow for commercial plantings, but the latter provides some protection when whole stalks are cut in the furrow. A furrow spray should be applied after the stalks are cut.

Benlate, Panoctine and Eria are registered fungicides that can be used at the rates given in the table below.

Note: Seedcane treated with Bayleton in the HWT tank for smut should not be treated later with another fungicide.

The use of a fungicide is recommended in the following situations:

- For hot water treated seedcane of all varieties.
- Wherever poor germination is a possibility. Treatment with a fungicide is particularly recommended for seedcane planted in autumn, winter and early spring in all areas.

Fungicide	Seedcane soak		Spray in the furrow or by planting machine
	HWT tank	Commercial cane (up to 5 minutes)	
Benlate 50% WP	37.5 g/100 litres	75 g/100 litres	400 g in 400 litres/ha
Panoctine 40% sol.	200 ml/100 litres	200 ml/100 litres	1 litre in 400 litres/ha
Eria 18,75% SC	50 ml/100 litres	50 ml/100 litres	--