

Registered fungicides for disease control in sugarcane

Always read product labels before use

Pineapple sett rot

Caused by *Ceratocystis paradoxa*, the disease is favoured by planting damaged setts in cold, dry or wet soil conditions. Symptoms are a reddening and blackening of internal sett tissue.

Management

Use fungicides, avoid plough-out replant, reduce sett damage and avoid planting in cold ground where germination will be slow or when excessive rain post-planting is likely.

Below: Registered fungicides for control of Pineapple Disease (sett rot).

Trade name	Active ingredient	Rate	Remarks
Sinker®	500 g/L flutriafol	500 mL/ha or 7.5 mL/100 m row	See remarks under the heading 'Smut'.
Tilt® 250ec, Bumper® 250ec, Throttle®	250 g/L propiconazole	20 mL/100 L water	Ensure thorough coverage of the cut ends of sugarcane setts.
Tyrant® 500	500 g/L propiconazole	10 mL/100 L water	Ensure thorough coverage of the cut ends of sugarcane setts.
Bayfidan® 250ec	250 g/L triadimenol	20 mL/100 L water	Apply to setts by dipping or spraying. Ensure thorough wetting of cut ends.
Sportac®	450 g/L prochloraz	40 mL/200 L water	Apply as a dip or spray to setts at planting. Ensure thorough coverage of all cut ends.
Shirtan®	120 g/L mercury (Hg) present as methoxy ethyl mercuric chloride	250 mL/200 L water	For dipping of small quantities use wire mesh baskets or crates to contain the cut setts and dip for approximately 30 seconds. Move the setts about in the solution to ensure thorough wetting. The solution should be discarded after completion of the dipping. If the solution changes in colour from red to black it should be discarded. For use in spray or dip planters. Ensure thorough wetting of cut ends or setts. If solution colour changes from red, or it becomes contaminated with soil, it should be discarded.

Smut

Caused by *Ustilago scitaminea*, the disease produces millions of minute brown spores that are transported by wind. Smut produces a very characteristic black 'whip' from the growing point and some side shoots. A heavily infected plant produces a grassy-like plant with very significant yield losses.

Below: Registered fungicides for control of Sugarcane Smut.

Management

Plant intermediate to resistant varieties and limit nursery plot infection with fungicides.

*Temporary permit

Trade name	Active ingredient	Rate	Remarks
Sinker®	500 g/L flutriafol	500 mL/ha or 7.5 mL/100 m row	<p>For the prevention of primary infection of sugarcane smut and pineapple disease in sugarcane.</p> <p>Apply as a spray onto setts in the planting chute. The spray should be applied with a minimum of 4 nozzles arranged in the planting chute to give thorough coverage of all surfaces of the setts before they are planted in the furrow. Apply in a minimum water volume of 350 L/ha and calibrate the planter prior to application and planting to give the correct rate of fungicide (500 mL/ha or 7.5 mL/100 m row).</p> <p>The use of a non-ionic wetting agent at recommended rates will enhance coverage of the fungicide on the planting material.</p> <p>* The rate is based on single row cane with a 1.5 m row spacing. If row spacing varies from 1.5 m then apply at the use rate according to mL/100 m of row.</p>
*Throttle®, *Tyrant®	250 g/L propiconazole	100 mL/100 L water	Apply as a dip treatment to sugarcane setts prior to planting.
*Tyrant® 500	500 g/L propiconazole	50 mL/100 L water	Mix with water at ambient temperature and dip setts for 5 minutes in this mixture.

Orange rust

Caused by *Puccinia kuehnii*, this disease produces millions of orange spores that are transported by wind. It is favoured by warm humid weather. Spores infect leaves to produce elongated lesions from which the orange spores are produced.

Below: Registered fungicides for control of Orange Rust.

Management

Plant intermediate to resistant varieties. Fungicides may be used but are rarely economic. Use only where monitoring is practised, and disease levels exceed 10% infection in the 5th leaf below the spindle (last unfurled) leaf.

Trade name	Active ingredient	Rate	Remarks
Folicur 430 SC (variety Q124 only)	430 g/L tebuconazole	290 mL/ha plus Agridex 1 L/ha 4 wks WHP	<p>Even low levels of orange rust suppress yields so it is important to apply Folicur early in the development of the disease epidemic. Begin monitoring disease levels early. Check crops at least weekly when climatic conditions favour the development of disease. Apply as foliar spray when disease begins to escalate rapidly. Repeat application after 14 days if conditions remain favourable to orange rust spore germination. Do not apply more than 2 Folicur sprays per season. DO NOT apply if heavy rains or storms that are likely to cause surface runoff are forecast with greater than 50% probability within 24 hours (48 hours if possible) of application.</p> <p>Ground application: Use droppers and directed sprays and sufficient water volume to ensure thorough coverage.</p> <p>Aerial application: Apply in a minimum spray volume of 20 L per hectare.</p>