Pineapple disease is caused by the soil-borne fungus Ceratocystis paradoxa which is common in all sugarcane soils. The fungus can rot the setts used as plant cane and prevent germination, dramatically reducing plant stand and subsequent yield potential. The disease is favoured by cool, wet or dry conditions.

Shortly after pineapple disease infection, the internal tissue of the seed piece turns red and eventually black (Figure 1) with a distinctive fruity smell. The black coloration results from the production of fungal spores within the seed piece.

Nodes act as partial barriers to the spread of rotting, however in susceptible varieties, entire seed pieces may become colonized by the fungus. The disease severely retards bud germination, shoot development and early shoot vigour. Pineapple disease can result in young plant-cane crops having a patchy, uneven appearance. When severe, the disease may reduce germination over large areas.

A large plot strip trial was planted near Giru in the Burdekin on 11 May 2016. Dual rows were planted 150 mm apart in the furrow, utilising 1.8 m beds.

The aim of the trial was to compare Sinker against propiconazole efficacy on pineapple disease. Both treatments were applied at label rates - Sinker was applied at 7.5 mL/100m row whilst propiconazole was applied to the cut ends of the sugarcane setts at 20 mL/100L. Both treatments were applied to the setts in the planting chute.

The Sinker treatment was highly effective, providing 1.32 times more shoots per metre of row than the propiconazole treated sugarcane setts (refer Figure 2 and 3).

The trial also demonstrated that the propiconazole treatment was not significantly different from the untreated plots (refer Figure 4) in terms of shoots per metre of row.

Figure 2. Sinker treated sugarcane - 62 days after application

Figure 3. Propiconazole treated sugarcane - 62 days after application

Figure 4. Emerged shoots at 22DAA, 35DAA and 62DAA.
APPLICATION

For the prevention of primary infection of sugarcane smut and pineapple disease in plant material used for cane production, apply Sinker:

- as a spray onto setts in the planting chute at a rate of 500 mL/ha* (or 7.5 mL/100m row) in a minimum of 350 L water/ha. Spray the setts via whole stalk or billet planters fitted with spray equipment in the planting chute.

For the prevention of sugarcane smut spread in infected planting material used for the production of seed cane ONLY, apply Sinker:

- as a 5-10 minute ambient dip treatment (at a concentration of 50 mL/100L water) prior to planting

* The application rate is based on single row cane with a 1.5 m row spacing. If row spacing varies from 1.5m then apply at the use rate according to mL/100m row.

For either application method, the use of a non-ionic wetting agent (eg. Activator®) at recommended rates will enhance coverage of the fungicide on the planting material.

COMPATIBILITY

Sinker is compatible with: Chlorpyrifos 500EC, Shirtan®, Senator® 700WG and Astra® 250EC.

WITHHOLDING PERIOD

Harvest: Not required when used as directed.
Grazing: Do not graze or cut for stock food for 32 weeks after treatment.

DIRECTIONS FOR USE

<table>
<thead>
<tr>
<th>CROP</th>
<th>DISEASE</th>
<th>RATE</th>
<th>CRITICAL COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugarcane</td>
<td>Sugarcane smut (Sporosorium scitamineum)</td>
<td>50 mL/100L water</td>
<td>Dip application (For treatment of planting material to be used for production of seed cane only) For the prevention of primary infection of sugarcane smut of sugarcane planting material apply as a 5-10 minute ambient dip treatment prior to planting. The use of a non-ionic wetting agent at recommended rates will enhance coverage of the fungicide on the planting material. Cane may or may not have previously been hot water treated for disinfection from other diseases.</td>
</tr>
<tr>
<td>Sugarcane</td>
<td>Sugarcane smut (Sporosorium scitamineum)</td>
<td>500 mL/ha* or 7.5 mL/100m row</td>
<td>Spray application For the prevention of primary infection of sugarcane smut and pineapple disease in sugarcane, 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/100m row). The use of a non-ionic wetting agent at recommended rates will enhance coverage of the fungicide on the planting material.</td>
</tr>
<tr>
<td>Pineapple</td>
<td>Pineapple disease (Ceratocystis paradoxa)</td>
<td></td>
<td></td>
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</table>

For more information on Sinker, contact your local Nufarm Territory Manager.

nufarm.com.au

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