

Pachymetra root rot

Pachymetra root rot (*Pachymetra chaunorhiza*) greatly reduces root growth and yield in susceptible varieties. It is a major disease in many parts of Queensland and the Condong mill area in New South Wales. To minimise losses, appropriate controls must be used.

Affected root systems typically exhibit a soft, flaccid rot of the larger roots, and are much smaller than healthy root systems. The fungus invades individual roots, usually near the root tip, and breaks down the internal root tissues. These roots either stop growing or are completely destroyed. Expect yield losses of up to 40 per cent from this disease.

Prevention and control

The only strategy for controlling pachymetra root rot is the use of resistant varieties. Some Australian varieties have good resistance to the disease and all varieties are screened for resistance before release.

Pachymetra spores are long lasting and can survive for more than five years in the soil. Short-term fallows (less than 12 months) have minimal effect on pachymetra root rot, and exposing soil to direct sunlight also has a minimal effect.

A soil assay for pachymetra root rot, based on counting spores of the fungus in field soil, can be used to determine the likely severity of the disease in commercial fields.



Above: Damage caused by pachymetra root rot.



Above: Pachymetra root rot effect on root growth. A more resistant variety (left) is not as damaged as the more susceptible variety (right).

Table Two: Soil assay for pachymetra root rot.

Probable disease severity	Fallow field	Standing crop
Low	0 - 30,000 spores/kg	0 - 50,000 spores/kg
Medium	30 - 60,000 spores/kg	50,000 - 100,000 spores/kg
High	> 60,000 spores/kg	> 100,000 spores/kg

The resistance ratings for all approved varieties are available from your local Productivity Service Officer, or from QCANESelect™ on the SRA website.

For our growers in New South Wales

New soil management guidelines to help you manage costs and farm more sustainably

On-farm nutrient management should be based on a sound understanding of soils.

Soil type influences decisions on the variety to plant and the amount of fertiliser to apply. It also has an impact on the choice of tillage practices, planting techniques, drainage and harvest schedule.

A good understanding of the different soil types, including their appearance in a landscape, can help growers farm more precisely.

If you haven't already picked up a copy of the *Soil-Specific Nutrient Management Guidelines for Sugarcane Production in New South Wales* from the Ag Office at your local mill, make sure you collect one during your next visit.

Developed in conjunction with the NSW Sugar Mill Co-operative Limited (NSW Sugar), the booklet combines

the SIX EASY STEPS program with unique aspects of growing cane in NSW to produce nutrient management guidelines specific to the soils of the three cane-growing districts.

Soil management guidelines for Isis and Mackay will be released by the end of the year, followed by guidelines for the Wet Tropics in early 2014.



(Continued)

Helping you improve your harvesting

This year's crush is well underway but with harvesting still to continue for another three months it's important to get it right.

Research by SRA's engineering division has shown that not using best practices – such as reducing harvester fanspeed and managing bin weights – could cause financial losses over \$1000 per hectare.

To help growers we will be conducting demonstrations in the NSW region to showcase the economic benefits of Harvesting Best Practice (HBP).

At the demonstrations you can learn more about the changes you can make during harvesting to reduce losses.



**4-11 September 2013
New South Wales**

You will also have the opportunity to see first-hand a prototype mobile system that accurately measures sugar loss in the field.

To register to attend a demonstration, contact Phil Patane, Development Officer – Harvesting, SRA on 0431 818 482.

Are you rat ready?

Phil Ross
Development Officer – Weed and Pest Management
Professional Extension and Communication Unit



Cane growers are allowed to bait for rats from 1 October through to 30 June. However, there are a few things you need to consider in managing rats.

The rats that cause most damage to cane, the ground rat (*Rattus sordidus*) and climbing rat (*Melomys burtoni*), are both native mammals and are protected under the *Nature*

Conservation Act 1992. Baits may be used as part of a management program under the conditions of an industry-wide Damage Mitigation Permit, issued by the Department of Environment and Heritage Protection.

For the cane industry to maintain this permit, it is important that growers meet the following requirements.