

# Yellow cane update No. 3 23 April 2013

This update has been designed to keep you up-to-date on the yellowing cane condition, research and trial outcomes and the next steps that are being taken to identify its cause.

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# Status of the initial investigations

Over the last three months BSES scientists have been investigating potential causes of the yellowing condition being observed in the Mulgrave, Herbert and Burdekin regions.

To date our thorough investigations of affected fields have failed to identify any potential causal agent that is common to all fields and there are no obvious conclusions as to what is causing the yellowing.

As nothing obvious has been observed the next step is to investigate the cause or causes of the problem in a systematic and controlled manner with field and laboratory trials.

See the right column for more information.

### Burdekin crop field visit update - April 17

Cane crops showing yellowing symptoms in the Burdekin were visited on April 17 by a working group that included a broad-knowledge research team from BSES, growers and representatives from the Burdekin Productivity Services Limited; Herbert Cane Productivity Services Limited; and the Sugar Research Development Corporation.

This group included the industry's most experienced plant pathologists, entomologists, agronomists and crop nutrition experts who have a combined knowledge base built from over 200 years' experience in sugarcane research.

New BSES field trials starting in April

Trial one: Transmission of yellowing by planting material. Tully.

With planting season upon us local productivity service boards are being asked by growers whether the yellowing disorder can be transmitted via planting material.

At this stage, we don't believe that the yellowing is caused by a systemic disorder but this has not been ruled out conclusively.

In an attempt to rule this out a trial will be established in Tully this week under controlled conditions.

Trial two: Linear bugs. Mulgrave area.

Aims to rule out linear bugs as a cause of the yellowing. The group agreed that some crops which are healthy and have been grown using best management practices are likely to have excellent yield, even though they have some yellowing. On the other hand, other crops which were not so well maintained are likely to yield less due to their poor condition, regardless of the yellowing.

# Identifying this particular yellowing condition

Although the yellow cane condition has been observed in a number of areas, we have noted that not all cases of yellowing are unexplained.

A number of factors including poor nutrition and lack of irrigation have been shown to have resulted in yellowing this season.

As such, it is important to refer to the <u>Symptoms of yellow cane</u> fact sheet on the BSES website to ensure that a correct diagnosis is made.

### **Planting material**

With planting season upon us local productivity service boards are being asked by growers whether the yellowing disorder can be transmitted via planting material. At this stage, we don't believe that the yellowing is caused by a systemic disorder but this has not conclusively been ruled out.

Until the results of this trial are known we recommend that growers stick to the basic principle of using the best quality planting material that they have. Cane that is severely affected and not growing actively is unlikely to germinate well and establish vigorously so should be avoided.

A trial will commence this week in Tully to determine whether planting material derived from cane displaying yellowing can transmit the disorder to new plant crops.

#### The next steps

Following the field visit, the working group would like to reassure industry that all steps are being taken to diagnose the condition.

A correct diagnosis is vital to understand the cause of the yellowing and finding a solution for growers that will work.

This will take time, as we saw some years ago when Northern Poor root syndrome was first identified. In this situation it was several years before Pachymetra root rot was identified as the causal agent.

Further regular updates will be provided over as additional information becomes available.

Previous copies of industry updates and images of the yellowing cane can be found on the **BSES website**