

**Yellow cane update
No. 2 10 April 2013**

The Professional Extension and Communication Unit (Unit), BSES continues to coordinate a working group of technical experts including entomology, pathology and agronomy researchers from BSES and staff from Cane Productivity Services groups to identify, in a systematic and rigorous manner, the cause of the yellowing observed in cane crops in the Mulgrave, Tully, Herbert and Burdekin regions.

The Unit also released a *CaneClip* extension video on Tuesday 3 April 2013 to raise awareness of the condition and provide information to the broader grower community. This video and images of the yellowing cane can be viewed on the BSES website www.bses.com.au

Since the last update, the area reported as displaying symptoms has continued to grow slowly in the Burdekin and Herbert regions. In addition Herbert Cane Productivity Services Limited (HCPSL) and Burdekin Productivity Services Limited have reported an indication of possible yield losses in their areas. Other areas are yet to report yield losses.

Activities that have been completed since the last update include:

- The development of a description of the disorder to ensure that all impacted fields are correctly identified. A copy is attached to this update.
- The development of a modified data base in which to record affected fields along with relevant agronomic information.
- HCPSL have set up a trial examining the impact of yellowing on germination and vigour of plant source material, the results of which will be reported in subsequent reports from this group.
- Field examinations continue in all affected areas in an attempt to develop ideas as to what causes the yellowing that can be tested in field trails and future experiments.

Examinations of affected fields have failed to identify any potential causal agent that is common to all fields.

The next stage of the investigation will be a visit to affected fields in the Burdekin by the working group next Wednesday. During this field visit a research program will be developed to test possible hypotheses in an attempt to identify the cause of the yellowing observed in affected fields.

Growers should continue to look out for the following symptoms in their crops and report any findings to their local Cane Productivity Services group:

- The spindle leaf shows faint general yellowing at the tip. This progresses to a stronger yellowing/chlorosis generally to one side of the leaf and towards the leaf tip.
- Leaves five or six show uneven course mottling, with areas of uneven green and yellow tissue developing. Unlike typical viral or nutrient deficiency symptoms, this symptom is uneven, and looks more like a stress condition or herbicide effect. It extends right down the leaf blade.
- The lower canopy leaves are more uniformly yellow, showing areas of brown-black necrotic spots. Leaf tips and some margins begin to die.
- Older leaves senesce early.
- There are no internal stalk symptoms or discolouration in the growing point area.
- The overall crop looks quite yellow, and this yellowing extends into the youngest leaves in the worst affected crops.

Updates will be provided as additional information becomes available.