



**Commercialisation of  
GM sugarcane**

**March 2010**

# Task of the Sugarcane-GTG

Develop and implement the agreed industry-wide strategy for the commercialisation of products from genetically modified (GM) sugar cane

taking full account of **market conditions**

This is a **commercialisation and industry development activity**, separate from the underlying R&D activity.

# BSES field trials – Bundaberg



GM Q117 – proof of concept fast growing cane,  
4 months old

# SGTG – Objectives

1. Ensure federal and state governments support the commercialisation of products derived from GM cane
2. Ensure relevant stakeholders are fully informed and engaged and satisfied that industry can properly manage technology
3. Pre-empt and assist industry to manage public debate by increasing awareness of GM technology and capacity to respond confidently in the public domain
4. Ensure communication is based on agreed facts, evidence and sound science not opinion, emotion and perception



# Roles – Industry & Government

- The role of industry
  - identify the benefits of biotechnology to agronomic practices and supply chains in prevailing market conditions recognising competitor activities
- The role of government (federal, state and local)
  - to regulate human & animal health and the safety and potential environmental invasiveness of biotechnology



# Steps to Commercialisation

1. Obtain regulatory acceptance
  - Engage with governments
2. Build acceptance
  - Industry support
  - Develop market support
3. Enhance stakeholder perception
  - Industry, consumer & public
  - Provide factual science-based information
4. SIP (Segregation & Identity Preservation)
  - Standards and procedures, as required
5. Facilitate commercial uptake
  - Develop process that allows GM cane adoption decisions to be taken at local level



# Today's Environment

## 1. Consumers

- many think they are already getting GM products (UQ survey)

## 2. Food processors

- wary of their brand integrity
- timing is a key

## 3. Queensland government

- “smart state” – working to ensure this includes agricultural biotechnology
  - not yet tested on GM crop, other than cotton
- action is required to avoid potential pitfalls
  - industry/government engagement



# Global GM sugarcane/beet work

## 1. Brazil

- sucrose yield
- pest and disease resistance

## 2. South Africa

- pest and disease
- herbicide resistance

## 3. US beet – commercialisation 2008

- 1st, herbicide resistance
- then, stack traits
- US judge denies injunction request

## 4. US sugarcane

- pest and disease
- herbicide resistance

## 5. Australia

- sucrose yield
- pest and disease resistance





# Improving trends in user and consumer attitude

## As the world begins to starve it's time to take GE seriously

By Robin McKie, *The Observer*

**28-April -2008** – With the Earth's population continuing to soar, it will be the poor who go hungry, not the eco-warriors destroying modified crops.



# It is timely to prepare the pathway

- GM sugarcanes offer strong prospects of
  - improvements in productivity
  - reduced environmental impact
  - cost savings
- High quality work is occurring in Australia and around the world
- GM sugarcane won't be available tomorrow but it is certainly within the scope of reasonable strategic planning timescales – expected within five years



Fast growing cane trial – Burdekin district



**sugarcane** gene technology group

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