

Helping plants make sugar

ALL green plants make sugar.

Some store more than others, but all make sugars as a way of storing and managing energy, which originally comes from sunlight.

Plants use photosynthesis specifically for making sugar, using captured light as the energy, carbon dioxide as the base and hydrogen and phosphorus as the energy storage bits.

What is important to growers in sugar production is that plants need help to make the sugar they store.

Plants get about 20 per cent of the energy they use to make sugar during photosynthesis from stores of energy in the soil.

Plants enlist help to make sugar from microbes, which live in healthy soil.

There is a complex trade-off — which happens around plants to help plants obtain the energy they need to make sugar.

Like a fully operating economy, it takes all sorts of participants, large and small, to make this system work well.

Plants trade off sugars and other sweeteners with fungi and other organisms in the soil in exchange for nutrients, energy compounds and building materials — like enzymes and proteins.

If these compounds are in short supply, the plant suffers. But when populations of microbes are abundant and diverse, there is more of what the plant needs available and the cost (to the plant) is cheaper.

Nutrients may be the stock in trade of this economy, but sugar is the currency that drives it.

Plants need energy from microbes in the soil to make sugar, and they spend sugar to buy nutrients.

The less plants need to spend in order to stimulate the supply of nutrients, the more sugar they have left when it comes to harvest time.

The more microbes there is supplying energy, the more sugar plants can make.

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Sucrogen confident in May 31 mills start



Project manager Col Smith watched the final piece of the stack being assembled at Invicta Mill.

A NEW stack at Invicta Mill has been erected in time for an early crushing.

The number one boiler stack was put in place two weeks ago with a crane at Giru.

The project was one of the bigger maintenance jobs carried out by Sucrogen at mills around the district.

Cane products operations manager Craig Doyle said maintenance was now well progressed on all the mills in the Burdekin ahead of the 2010 crushing season.

“Some of the projects are on tight time lines and the amount of overtime being worked has been ramped up since Easter,” Mr Doyle said.

“We embarked on an ambitious improvement program this year and our people have worked hard to ensure projects have remained on track.

“We’re confident all of our mills will be ready for a May 31 start date.”

Pioneer and Kalamia mills currently plan to hold steam trials in the week beginning May 17, with Invicta and Inkerman to run their pre-season checks the next week.

Despite initial fears, Mr Doyle said the fire, which occurred at Kalamia last Saturday night was not expected to impact on the proposed start date.

“We have now done a full assessment of the damage and believe all of the repair work can be completed before May 31,” he said.

“Many of the required parts were readily available, which significantly reduced time lines.”

Based on pre-season estimates, the Burdekin mills are expected to crush about 8.3 million tonnes of cane this year.

“That’s about a million more tonnes than last year,” Mr Doyle said.

“We’ve decided to start crushing earlier than the traditional Tuesday after Queens Birthday long weekend date, with a view to finalising operations in mid-November, provided average in-season rain is received.”

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QSL season opens with record advance

LEADING international sugar marketer, Queensland Sugar Limited (QSL) has announced an initial advance rate for the 2010 season of \$265 per IPS* tonne of raw sugar (GST exclusive) for Australian miller suppliers.

The advance is 60 per cent of the forecast final 2010 Pool price and is the highest initial advance QSL has ever achieved.

“The advance rate reflects the strength of QSL’s customer relationships, with key sugar refiners in Asia and the success of QSL’s strategic approach to marketing Australian sugar,” said Neil Taylor, QSL’s managing director and chief executive officer.

“This advance rate will be paid on all sugar delivered to QSL in 2010 under the Raw Sugar Supply Agreements we have with eight Queensland sugar millers.

“Under these Agreements, QSL is responsible for more than 90 per cent of Australia’s sugar exports.

“The QSL Sugar Pool and advances provide Australian sugar millers and growers with direct access to international markets and generate price transparency for the entire industry,” Mr Taylor said.