MODULE 5

THE BOOKENDS OF CROP MANAGEMENT: PLANTING AND HARVESTING

YOUR FARM, YOUR WAY Smartcane BMP is a program for you to document and celebrate the way you farm.

What is this about?

Planting and harvesting are the two bookends of cane growing, but getting optimal results from each of these practices can be difficult.

There are many things to consider before planting, and each of these can affect productivity for the whole crop cycle, for example:

- the variety of cane and its characteristics for productivity, disease resistance, etc.
- the disease status of the planting material
- the quality of the billets
- the time of planting, ensuring good soil temperature and moisture levels
- using a planting system that works for you and your farm.

On the other hand, harvesting is about optimising efficiency and timing while minimising damage to the stool.

Fallow management, land preparation, weed management, grub control, and nutrient management are also important, and are covered in modules one and three.

Why is it important?

Planting success has a major effect on farm profitability over the subsequent 4—5 years. Further, the risk of impacts from disease and pests over the crop cycle are largely managed by using clean seed and choosing a resistant variety of cane.

Inefficient harvest is an obvious loss of income—many growers are requesting their harvest contractors to vary the harvester set-up and speed to reduce harvest loss and minimise effects on crop regrowth.

What's next?

REVIEW AND DISCUSS

If you'd like to document or review your planting and harvesting practices, you can access Module 5 at **smartcane.com.au**. The module records your current practices, and the checklist format helps to identify options for further improvement.

Your district facilitator or productivity officer can help you follow-up on additional information, training or expert advice.

If you'd like more information, the following resources are available for free on the SRA website, **sugarresearch.com.au**:

- SmartCane plant cane establishment and management
- Harvesting best practice manual

GET INVOLVED IN SMARTCANE BMP

Smartcane BMP has modules that cover all aspects of the cane farming business. It includes the option to become accredited in the farming practice modules (Modules 1, 2 and 3). Participation is entirely voluntary, and your facilitator can talk with you about what's involved and put you in touch with local growers who are also part of the program

Contact your district facilitator to get involved.

SMARTCANE BMP

Turn over for more information

What's in the module?

INDUSTRY STANDARD	ABOVE INDUSTRY STANDARD
FARM MAP	
Creating a farm map and using it to identify soil types, soil sampling types, topography, drainage lines, sensitive areas, management units and crop class	Creating a high-resolution farm map with multiple layers and using it to make strategic management decisions
FARM DESIGN	
Creating a farm design that allows for efficient farm operations with consideration of environmental outcomes	Creating a farm design that maximises the efficiency of farm operations—taking into account business and environmental outcomes
VARIETY MANAGEMENT	
Implementing a short-term variety plan based on production, CCS, time of harvest, soil type, and disease information	Implementing a long-term variety plan that incorporates trialing new cane varieties
CLEAN PLANTING MATERIAL	
Planting cane from approved seed sources and within two years of hot water treatment or tissue culture	
BILLET QUALITY FOR PLANTING	
Keeping your harvester in good condition, sterilising it between blocks and varieties, and keeping records of planting material	Using a dedicated plant cane harvester with the majority of billets having three eyes in sound quality
TIME OF PLANTING	
Planting as early as possible with adequate soil moisture—soil temperature at planting depth should be at 18°C or above for more than five days prior to planting	
PLANTING	
Ensuring granular fertiliser does not come into contact with the sett, correctly setting up the press wheel for best seed to soil contact and adequate coverage, and ensuring planting rate is known and appropriate for your farming system	Maintaining an even planting rate by using a variable rate controller on planter
LOSS MINIMISATION	
Engaging with a contractor to minimise losses through harvester optimisation and crop presentation	Providing a written harvest contract to your contractor, detailing your harvest strategy, to minimise losses
MINIMISING STOOL DAMAGE AT HARVEST	
Following harvesting best practice as outlined in Sugar Research Australia's Harvest best practice manual, including matching the row profile to base cutter setup and using correct harvesting speed	Using GPS technology to separate traffic from cane growing area
BLOCK SELECTION FOR HARVESTING	
Selecting blocks based on the crop's CCS profile, crop age, soil moisture conditions and other farm management considerations	