EXTENDED FALLOW PERIODS IN THE BURDEKIN: EFFECTS ON CANE PRODUCTION AND FARM PROFIT

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CANE PLANTED IN MARCH/APRIL in the Burdekin region usually maximises production. These crops follow either a bare or green manure legume fallow period. Crops such as soybeans can be grown and potentially produce large yields if the grain is allowed to develop. However, this delays sugarcane planting until late May or Spring.

Yield of these spring-planted sugarcane crops may be reduced, in comparison to March/April-planted sugarcane, due to a shorter growth period. However, at a grower level, the price of the harvested grain offers compensation, the extent of which is dependent on sugarcane and grain crop yields and prices.

Previously, when March/April-planted cane has been compared to spring-planted cane, the spring-planted cane was often from a plough-out replant system. In this case the spring-planted cane will be following an extended fallow period that includes a break crop.

These systems have been shown to be beneficial for sugarcane production in comparison to plough-out replant systems, and often the benefits continue through the entire crop cycle.

In late 2011, a large-scale project examining complementary break crops for sugarcane commenced in the Burdekin. There are three main aims for the project.

Firstly, the effect of fallow length on cane production will be quantified in a 'time of planting' experiment.

Secondly, the impact of long (18 month) and short (4–6 month) rotation crop sequences on sugarcane productivity and farm profitability will be assessed.

Thirdly, agronomic experiments will be conducted to provide better and more relevant management strategies specific to growing break crops, such as mungbeans, soybeans and maize, in the Burdekin region. This is to ensure break crops in the sugarcane system are managed effectively in order to maximise returns of both the break and sugarcane crops.

This poster summarises the issues being addressed in the project, the trials currently underway in the Burdekin region and some preliminary results.