

**KEY CHARACTERISTICS OF IMPROVED MANAGEMENT PRACTICES—A SUGARCANE GROWER'S PERSPECTIVE**

By

ALISON COLLIER<sup>1</sup>, MATTHEW THOMPSON<sup>1</sup>, MARK POGGIO<sup>1</sup>,  
MARCUS SMITH<sup>1</sup>, MARTIJN VAN GRIEKEN<sup>2</sup><sup>1</sup>*Department of Agriculture and Fisheries, Townsville*<sup>2</sup>*The Commonwealth Scientific and Industrial Research Organisation (CSIRO)*

THE IMPACT OF cane farming across North Queensland is of significant environmental concern owing to the proximity of cane farming to the Great Barrier Reef (GBR). A key mechanism to improve the quality of water entering the GBR catchment area is the efficient and extensive adoption of improved management practices.

Management practice adoption is a complex decision-making process, motivated by a grower's perceptions of the impact on farm profitability and other farming system characteristics. Accordingly, a survey of sixty-one North Queensland cane growers in Ayr, Ingham and Tully was conducted to investigate factors influencing adoption decisions for ten improved management practices.

The management practices with the highest adoption rates were: varying herbicide rates between blocks (95%); directed herbicide application (93%); and, variable nutrient rates between blocks (91%).

These practices were perceived as being compatible with the existing farming system and easy to trial, while requiring only a limited amount of new skills and a low capital investment. Furthermore, these practices were perceived by growers to have a positive impact on profitability.

The management practices with the lowest adoption rates were: variable nutrient rates within blocks (7%); knockdowns and strategic residual use (23%); and electronic records (36%).

These practices were perceived to require a high capital investment and a large amount of new skills. These practices were also perceived by growers to have a negative impact on farm profitability.

The poster will illustrate the design of the survey and provide a summary of the research results.