

**Project No.:** UA 2/04

**Project Title:** "SABRE" – a barley industry initiative to breed, test and commercialise feed, food, shochu and hulless barley varieties

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#### **Executive Summary**

Feed barley is a key component of the SA grains industry, with feed varieties contributing approximately 750,000 tonnes of production per annum, and allowing growers to manage challenging agronomic constraints with a low input, low maintenance cropping option.

The current project has contributed to the development and commercialisation of two new feed barley varieties for South Australia. Capstan was developed specifically for high productivity regions and is well suited to aggressive nitrogen management targeting very high yields and offers very short straw facilitating improved stubble management. Maritime provides growers a significant yield improvement on manganese deficient soils and a major advance in physical grain quality that is of benefit to growers struggling to achieve minimum test weight specifications. Both varieties are subject to \$1.20 end point royalty, and SAGIT investment has earned 6% equity in Maritime and 8% equity in Capstan.

Shochu grade barley is a high value market for SA barley growers. The current project has evaluated agronomic and environmental factors influencing pearling quality and subsequent shochu production. Key management factors that can improve the probability of growers achieving the tight shochu quality specifications have been identified and communicated directly to growers and advisory groups.

Hulless barley represents a small niche within barley production, however the University of Adelaide barley program has pursued the development of improved hulless varieties as a strategic direction that could potentially offer growers high value returns through human food and novel end-use applications. Potential hulless varieties with novel starch properties are currently in the pipeline. The current project has evaluated agronomic management factors specifically relating to hulless barley production to provide guidelines to growers to maximise productivity. Resolving production issues continues to be a key challenge as work progresses towards launching high value hulless barley varieties.