



4B- 115: Advancing *Berkshire* triticale supply for the Australian pig industry

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Aims and Objectives:

To provide a guide for triticale supply chains that could be economically and environmentally efficient for the Australian pig industry in WA and SA, and to complete an assessment of these chains to determine the likelihood of their success.

Key Findings

Whilst the project objective of facilitating production of up to 10,000 tonnes of *Berkshire* in WA and SA was not officially realized through this project, the assessments of the supply chain provided valuable information. Knowledge gaps were identified and outputs were prepared and distributed to address this lack of information. Generally, communication within the supply chain appeared to be sufficient to facilitate growing and using *Berkshire* within the supply chain. Even so, demand for *Berkshire* is spasmodic with price incentives being limited due to seemingly adequate supply of alternative grains. Further, supply of triticale is irregular and after poor seasons is unlikely to be grown unless the grain producer has ample resources to use it as a break crop or receives a price incentive to grow it. Failure to establish a successful closed-loop supply chain was perhaps due to an overestimation of production risk and an underestimation of price risk. However, in due course when supply of grains for feed is limiting the advantages of a closed-loop supply chain for both pork producers and grain growers will be evident.

To that end, the following recommendations have been made: endorse triticale varieties as energy substitutes for wheat to encourage triticale demand at a market price; should demand increase, encourage feed buyers to communicate with agronomists and triticale growers to stimulate supply; in the short term, to increase the area grown of triticale and specifically *Berkshire*, the focus should be the “Grower-User” market segment involving mixed pork/grain businesses; remove the PBR status from *Berkshire*; follow the progress of triticale as a food grain and use any positive market developments to benefit feed grains; a market awareness campaign for grain bought as feed and a workshop program focusing on price risk management and grain trading be made available for producers and buyers of grains purchased as feed for the pig industry; to ensure security for grain used as feed, there is merit in testing the closed-loop supply chain concept again with a mainstream commodity such as wheat or barley; the Pork CRC should not be involved in plant breeding of niche varieties.

Application to Industry

Currently the most likely market that exists for *Berkshire* remains with mixed pork/grain businesses where both a grain growing and a pork production enterprise are conducted. Should a new high-energy grain variety become available for use in pig feed (e.g., there are 14 relatively new triticale varieties), it is not likely to be available in all regions nor is it likely to be a requirement in all pig diets. Generally the market is not currently sophisticated enough to ensure that the value of DE is reflected in prices, despite the technology (AusScan) existing. Hence any premiums are likely to arise only by negotiation of individual parties. Should such negotiations arise, supply of a particular variety would be more secure and pig producers may benefit from the higher energy content.

For this reason, and given the substantial cost of variety development, it is recommended that Pork CRC should not be involved in plant breeding of niche varieties. It is envisaged that existing plant breeding programs of mainstream species and varieties will meet the feed grain needs for the pork industry.