Bonsmara: backed by science

By PENELOPE ARTHUR

A GROWING number of beef producers across northern Australia are coming to recognise the benefits of using tropically adapted Bos taurus breeds, such as Bonsmara, in their crossbreeding programs.

Large scale producers, such as the Australian Agricultural Company (AACo) are now using Bonsmara genetics in their breeding operations and are anecdotally reporting improvements in traits such as herd fertility and meat quality since the introduction of Bonsmara bulls.

John Bertram is a highly respected Australian beef extension specialist who spent 33 years with state agricultural departments in the Northern Territory and Queensland and now consults privately to organisations such as the University of Queensland and Tropical Beef Technology Services.

Mr Bertram said that while there had not been a large body of research work done in Australia specifically on the Bonsmara breed, scientists could confidently draw on work done on other tropically adapted Bos taurus breeds similar to Bonsmara in genotype to reinforce growing anecdotal evidence about the positive performance of Bonsmara cattle in northern Australia.

“There has been research done by CSIRO scientists that demonstrates the Belmont Red and Bonsmara genotypes are relatively similar and therefore we can draw on previous work done on tropically adapted Bos taurus breeds,” he said.

“The research points to the fact that the Bonsmara breed are generally adapted to our tropical climate and can perform very well under tropical and sub-tropical conditions.”

“The breed, generally, has a moderate growth rate, a level of adaptation to external parasites and generally a good reproductive rate.”

“While Bonsmara cattle are generally very fertile, I would always recommend that breeders making any selection decisions should ask for relevant fertility information, such as a bull soundness evaluation prior to purchasing.”

Bonsmara cattle...

- perform well under tropical and sub-tropical conditions
- have a level of adaptation to external parasites
- are generally very fertile
- reach puberty early
- have good carcass attributes including eating quality while maintaining high levels of tropical adaptation

A purebred Bonsmara steer, 26 months of age, with the excellent butt shape and muscle expression that is characteristic of the breed.

... their heat tolerance combined with eating quality should make them a valuable genetic resource

Mr Bertram has oversown the use of Bonsmara genetics in the Emerald Agricultural College’s composite herd and was impressed with the results.

“Bonsmara cross animals provided good reproductive rates as assessed by breeder conceptions in a short, restricted mating period,” Mr Bertram said.

“My experience has been that their progeny generally reach puberty at a relatively young age compared to other tropically adapted genotypes – generally around the yearling age of 12 months.”

“Their carcass attributes are also generally very desirable to meet our northern markets including Jap Ox, domestic and live export.”

“They are clearly a very suitable genotype to be used with pure Bos indicus cattle to gain higher levels of hybrid vigour, increased reproductive rates and maintain good carcass attributes including eating quality while maintaining high levels of tropical adaptation.”

Mr Bertram’s observations match the findings of a research project undertaken by scientists from the Cooperative Research Centre for Cattle and Beef Quality, including Dr Heather Burrow, in 2003. The project sought to model the economic benefits of changing from a high Bos indicus content herd to either a terminal crossbred or a three-breed-type tropically adapted composite herd in northern Australia.

The study concluded that: “significant economic benefits will accrue by changing the composition of a proportion of the northern herd from Brahman to Crossbreds or Composites.”

The researchers went on to conclude that due to the inability of many British and continental bred bulls to thrive in northern environments without additional care, beef producers should look to use tropically adapted Bos taurus breeds, such as Bonsmara, in their crossbreeding or composite breeding programs.

“This highlights the need for, and importance of, the tropically adapted Bos taurus breeds in structured crossbreeding or composite development programs targeting the tropics and sub-tropics. Use of these breeds allows producers to manipulate heterosis between breed types and levels of adaptation to environmental stressors (up to 100% of “adapted genes” if required) without incurring significant reductions in production that may occur from inappropriate use of British or Continental breeds in these environments.” (Burrow, Griffith, Barwick and Holmes, 2003).

M S A tests prove Bonsmara meat quality

WHEN Tony Berry wanted objective data on the eating quality of Yara Bonsmara and Bonsmara cross beef he went straight to the ultimate authority on meat quality in Australia, Meat Standards Australia (MSA).

Mr Berry submitted ten striploins from Bonsmara Brahman cross bullocks for consumer testing carried out by the MSA Pathways Committee in 2011.

Pathways Committee Chairman, Rod Poldinghome, said the cuts averaged MSA 4, a credible result and directly in line with the Tenderstretch Boring Group 4 criteria.

Mr Poldinghome said the results supported claims by Bonsmara breeders that Bonsmara genetics could improve the meat quality of Bos indicus cattle.

“The Bonsmara cross Brahman ate as would be expected for a British bred-Brahman indicating that the Bonsmara breed could be very useful in improving eating quality when crossed with Brahman cows,” he said.

“From reputation, their heat tolerance combined with eating quality should make them a valuable genetic resource.”

They are clearly a very suitable genotype to be used with pure Bos indicus cattle...

The Bonsmara Droughtmaster cross, just one of the crosses proving the success of infusing Bonsmara genetics into a Bos indicus herd.