

## Mastitis resistance to underpin breeding program

**Dairy farmer: Trevor Saunders and Anthea Day**

**Region: Gippsland, Victoria**

**Topic: Mastitis Resistance Australian Breeding Values (ABVs)**

The new Mastitis Resistance ABV will become a “key platform” in the breeding objectives for Gippsland dairy farmers Trevor Saunders and Anthea Day.

Milking about 950 head, predominantly Jerseys, across two farms at Shady Creek, they have been looking forward to the release of the new health trait.

“I think it is tremendous,” Trevor said. “It really is a key component for genetic economic management. We won’t be using a bull under 100 for mastitis resistance going forward.”

Trevor and Anthea have concentrated on breeding for protein, likeability, type traits such as strength and udders, adding fertility and cell count into the mix in recent years.

They believe the Mastitis Resistance ABV will have more impact on their herd than the Cell Count ABV.

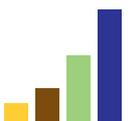
“Mastitis resistance is a significant thing for us,” Trevor said.

“We were using cell count as one of our key selection criteria, but we will change that to Mastitis Resistance because it brings in more aspects, other than just cell count. For example, the Mastitis Resistance ABV includes records for clinical cases of mastitis; this makes it a significantly more rounded ABV.”

While the Mastitis Resistance ABV has the potential to make huge improvements in dairy herds throughout



*Trevor Saunders and Anthea Day will only be using bulls with a Mastitis Resistance ABV greater than 100.*



Australia, Trevor said nothing was more important than on-farm management when it came to reducing mastitis.

“Mastitis resistance is a low heritability trait, similar to fertility,” he said.

“When you use it in a breeding program, it is a compounding trait and it relies on generations of use. It is still important to have good management in place.

“Nevertheless, it’s a really good development for DataGene to have a Mastitis Resistance ABV. I’ve been really keen on it right from the start.”

The Mastitis Resistance ABV is one of three new or updated health traits released by DataGene on 14 April: Mastitis Resistance, Gestation Length and Calving Ease. Jersey breeders will be interested in using the Mastitis Resistance and Gestation Length ABVs to complement on-farm management practices.

Farmers milking all breeds of dairy can now select to directly improve the mastitis resistance of their next generation. Even young genomic animals now have a Mastitis Resistance ABV.

Previously, the Cell Count ABV was used as an indirect selection criterion for mastitis resistance, but this new ABV draws on three sets of information to directly target mastitis. These include: 305-day somatic cell count, udder depth and clinical mastitis records. The Cell Count ABV will continue to be published as it is a useful tool to breed cows that contribute to a lower bulk milk cell count.

### ***To breed replacements with improved mastitis resistance, select animals with a Mastitis Resistance ABV of greater than 100.***

The new Gestation Length ABV gives farmers a breeding tool to manage late calving cows and help tighten calving patterns. An earlier calving pattern means cows are in milk for more days before re-joining. This gives them more time to recover after calving and get back in calf sooner.

The ABV identifies bulls and cows whose calves are born earlier than their expected due date. Cows that calve earlier are in-milk for more days before re-joining and have longer to recover post-calving.

To breed for a shorter gestation, look for bulls and cows with a Gestation Length ABV of less than zero. Every 1 ABV is about 1-day shorter gestation.

The new ABVs published by DataGene in April are the result of DairyBio research, drawing on records supplied by Ginfo herds. DairyBio is a joint initiative between Agriculture Victoria, Dairy Australia and the Gardiner Dairy Foundation. The Mastitis Resistance ABV is based on the findings from the research project Health Data for Healthy Cows, which was funded by the Gardiner Dairy Foundation. Thanks also to farmers and software providers who supply data used in genetic evaluations.

Read more at:

[Mastitis Resistance ABV Fact Sheet \(for a quick read\)](#)

[Mastitis Resistance ABV Tech note \(for people wanting more detail\)](#)

## CONTACT US

ABN: 78 613 579 614

DataGene Limited, AgriBio, 5 Ring Road,  
La Trobe University, Bundoora Victoria 3083



email: [enquiries@datagene.com.au](mailto:enquiries@datagene.com.au)



[www.datagene.com.au](http://www.datagene.com.au)



T (03) 9032 7191



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