

C4Milk dairy team pushing forage boundaries – Animal Trial

By Amy Anstis

How much high quality forage can a cow eat whilst maintaining high levels of profitability and productivity? From March the UQ/DAF Gatton Research Dairy will commence a dairy cow feeding trial over a three month period to show how high levels of home grown forages fed in the autumn affect milk production. The trial aims to push the boundaries of feeding high quality forage to dairy herds to reduce the reliance of producers on purchased concentrates. Dairy competes for concentrates such as grain and protein meal on an ever increasing basis against other food industries. Over time this leads to proportionally higher costs of bought in feed. One of the key advantages of the tropical dairy production systems is our ability to grow a large amount of forage; however managing the quality of the forage can be difficult at times which is what the trial aims to show case. The C4Milk Team has been refining the management of crops and pastures in recent years, the trial will implement many of these practices including headlage, soybean silage, brassicas and high chop corn as part of high milk potential diets for the autumn feed gap.

Our current industry practice for forage to concentrate ratio (F:C) is around 60:40 and can be as low as 40:60 on some farms, industry has seen a trend in the last 10 years towards feeding higher proportions of purchased feeds such as grain and protein meals to achieve target milk production levels. The cost of home-grown forage can be significantly lower than concentrates, with C4Milk's view that with the use of starch and protein based forages such as corn and soybean silage and headlages, we have the ability to increase the F:C to 75:25. As a result, the trial aims to demonstrate that the cost of the diets can be reduced without reducing milk production. The C4Milk Team's trial will be pushing the boundaries beyond the F:C 75:25, with the home grown forage proportion reaching 80, 90 or even 98% of the diet. The question is, can a margin over feed cost (MOFC) of 40-46c/ L still be reached and or maintained? Furthermore, can we find high forage diets that will allow early and mid lactation cows to recover from a hot summer to produce profitable milk?

To have achieve industry relevance and robust data, the trial consists of 3 phases representing different regional diets: irrigated forages, dryland forages and irrigated alternative forages. Throughout the trial there will be two groups of cows, a TMR herd and a PMR herd representing and trialling a range of feeding systems and management strategies.

During the trial, information on the diets and milk production will be made available regularly through local newspapers, social media platforms, dairyinfo.biz website and the like. This will allow producers to follow the progress of the trial, and identify strategies that may relate to their own

system to help improve profitability over the autumn feedgap. “In this trial, we aim to optimise the use of tropical forages in both TMR and PMR systems. In all phases we will exceed a forage to concentrate ratio above 80:20, while reducing feed related costs” said Amy Anstis, Research Scientist leading the trial.

Keep an eye out for updates of the trial in industry newsletters, QDO updates, social media and Dairyinfo.biz. The UQ/DAF Gatton Dairy will run field days during the trial to give producers, service providers and industry the opportunity to see first-hand the trial in action. A series of video updates will also be released during the trial to keep a visual record of the outcomes and for those regions unable to attend the field days.

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