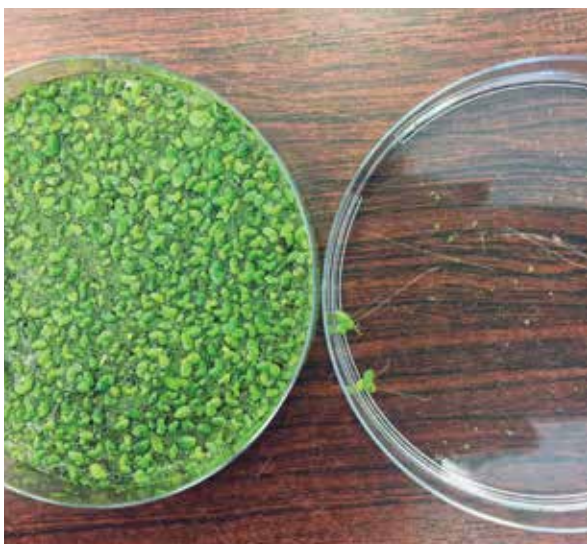


# C4Milk Animal Grazing Experiment and R&D Open Day



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**The Department of Agriculture and Fisheries (DAF) dairy team at UQ Gatton are about to embark on a series of grazing management experiments investigating the effects of forage quality on feed intake and milk production of dairy cows.**

The initial grazing trials will look at how pre-grazing height and pasture structure of lucerne impacts intake, diet quality and milk production. In the northern dairy industry, lucerne is generally grown and fed as a high quality hay in a partial mixed ration, though it is also recognised as a highly digestible, high quality, low cost pasture. There are some farmers already confident in grazing lucerne, yet many still hold concerns for the risk around animal bloat, and persistence of the lucerne crop from over-grazing. However, based on previous trials the C4Milk team have found that significantly higher milk production can be achieved when grazing lucerne compared to kikuyu, with no effects of bloat and minimal damage to the crop. Dr David Barber, lead scientist of the C4Milk research team comments that ‘our research program is based around identifying strategies and forages that improve the quality of the diet being consumed. If we can drive the levels of quality pasture and total dry matter consumed, we should see increases in milk production, improving feed conversion efficiency and margin over feed costs for producers.’

As part of the new five year project DAF has secured with Dairy Australia, the C4Milk dairy team will deliver a number of large scale animal trials at the Gatton Research Dairy. The trials will include identifying ideal pre- and post-grazing heights of pastures, responses to concentrates and forages fed in partial mixed rations to maximise pasture intake, and the effects on production of

differentially feeding cows. The first experiment began in early April, where 12 groups of cows grazed different heights of Lucerne pasture, whilst being fed either a high or low amount of a mixed ration on the feed pad. Dr Marcello Benvenuti explains that ‘we have found that intake rate seems to be lower with extreme pasture heights, where the structure of pastures that are too short or too tall interfere with the grazing process and result in lower bite mass and intake rate’. ‘By identifying the ideal pre- and post-grazing heights, we hope that producers will be able to adopt new strategies when grazing lucerne and other pasture species, increasing both intake rates, diet quality and ultimately improving their profit margins’.

The trial will run for six weeks to assess the impacts on milk production, with the C4Milk team holding an R&D Open Day on Friday 18th May, where dairy farmers and service providers attended the Gatton Research Dairy at UQ Gatton to have a look first hand at the animal grazing trial in full swing. The C4 Milk R&D Open Day showcased the current results of the lucerne grazing trial as well as presentations on a number of other current developmental trials including a remote drafting system and using Duckweed as an alternative protein forage.

**If you are interested in finding out more about C4 Milk, please contact the DAF service desk on 13 25 23.**

