The Influence of feeding Grape Marc to Goats on Milk Composition.

Phase 2 Trial.

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Introduction

While positive results were obtained in the quality of milk from goats while fed a supplement of dried and milled grape marc (GM) the results were variable and could not be quantified accurately. (1) As a result, this study needed repeating.

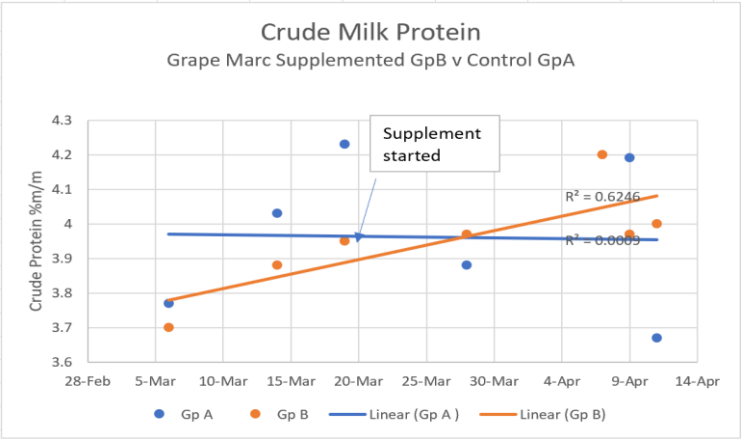
Materials and Methods

This study took place on a small milking goat herd near Ward Marlborough. The goats still being milked in early March 2022 were split into two even groups of 12 animals/group based on production and age. These were identified as groups A and B and milked separately. After 2 weeks of being milked separately Group B was supplemented with approximately 300gm GM per animal added to 300gm of a meal ration (Enopro). Gp A animals were fed 600gm of 'Enopro'. Samples were collected at set times prior to and after GM was started on the 21st March.

Results

Crude Milk Protein %m/m							
	6-Mar	14-Mar	19-Mar	28-Mar	7-Apr	9-Apr	11-Apr
Gp A	3.77	4.03	4.23	3.88		4.19	3.67
Gp B	3.7	3.88	3.95	3.97	4.2	3.97	4

Gp B = GM supplemented



There is a significant improvement in milk crude protein levels in the milk from GM treated animals. This difference was again not quantifiable.

Discussion

For several reasons this study was unable to get started until very late in the season. This was unfortunate because by the time it got underway several animals from an already small herd had already dried off which limited the number of animals that could be included in the trail. During the trial period more trial animals also came into season which seriously impacted on their milk production. With very low numbers of animals per group a change in performance by one, especially one that was a major contributor to total daily production, was likely to have had a major influence on the crude protein measurements.

Added to this was the concern that a number of the GM fed group were not getting sufficient time to consume their GM. From past experience with feeding GM, animals seem to prefer taking some time to eat the GM with its high tannin content, coming back to the feeder to consume small amounts at a time. There was also some concern that the particular batch of GM used in this study was not of the highest quality with some evidence of a deterioration in quality.

The importance of confirming significant improvements in milk quality when GM is added to milking goat diets, on top of helping in parasite control, needs be properly validated and further trial work will have to be undertaken. A repeat of this latest trial with the same herd but with more goats is being planned to start after kidding later in 2022. It will also involve further monitoring of parasite burdens.

References

1. The Influence of feeding Grape Marc to Goats on Milk Composition. Anderson PVA, Batten GJ

Acknowledgement

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