



EIPWALES

Cydweithio er ffyniant gwledig
Collaborating for rural success



Sheep Milking

Managing dairy ewes for cheese production

THE ISSUE:

What factors control the bacteriological profile of sheep's milk?

PROJECT AIM:

To investigate how the following three controllable factors influence the quality of sheep milk for unpasteurised cheese production.

1. Breed of sheep
2. Stage of lactation
3. Selenium diet supplementation

THE GROUP:

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PROJECT TIMEFRAME: February 2019 - February 2021

Activity in 2019

- Milk samples were taken from 15 Friesland ewes and 15 Lleyn ewes throughout their lactation to test whether the breed of sheep has an effect on milk quality.
- Another 15 Lleyn ewes were fed selenium with their concentrate feed to test whether it has any positive effect on milk quality and composition.
- Nasal swabs were taken from 30 ewes to test whether there is any correlation between udder and nasal cavity bacterial populations.

Results from 2019

- The majority of ewes with high SCC produce milk with lower total solids.
- This indicates that ewes with chronic sub clinical infection and high SCC will have poorer milk quality which could reduce the yield of cheese produced.
- No correlation was found between nasal and milk bacteriological samples.
- The results of supplementing ewes with selenium is inconclusive after year 1.
- Different bacteria groups were identified which will enable farmers to take the appropriate husbandry actions to improve milk bacteriology.

June 2019 – Total milk solids of each ewe vs somatic cell count (SCC)

