Effect of pre-graze mowing at different pre-graze masses on cow and pasture performance

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Introduction

- Some farmers target higher than recommended pre-graze pasture masses (to maximise pasture growth) with a belief that mowing before grazing is required to harvest this extra pasture.
- Objectives of this study were to investigate the effect of mowing before grazing at recommended and high pre-graze pasture mass.

Materials and Methods

- Conducted at Lincoln University Research Dairy Farm, Canterbury, NZ for 120 days during spring and summer (Oct - Feb).
- 144 multiparous cows were randomised into 8 farmlets, that were allocated to 1 of 4 treatments in a replicated 2 x 2 factorial study.
- Treatments were two pre-graze pasture masses: 2,800 kg DM/ha, above ground level (MOD), vs. 3,400 kg DM/ha (HIGH), and two harvesting methods: grazing standing pasture (GRAZE), vs. mowing before grazing (MOW).

Results

- Cows in MOD produced 6% more milksolids (fat + protein) than in HIGH
- Cows in MOD spent less time grazing than in HIGH
- No effect of harvesting (MOW vs. GRAZE) on cow performance
- MOW reduced pasture density and pasture harvested
- MOW reduce silage made and increased silage fed

Conclusions

Cows offered a MOD pre-graze pasture mass produced more milksolids than those offered a HIGH pre-graze pasture mass and this was not affected by mowing before grazing. Continuous mowing of pastures reduced pasture performance and increased the requirement for imported feed.

Measurements

- Daily milk yield and weekly milk composition
- Fortnightly body condition score
- One week of behaviour measurements
- Weekly farm walks and post-grazing mass
- Weekly pasture nutrient and botanical composition

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