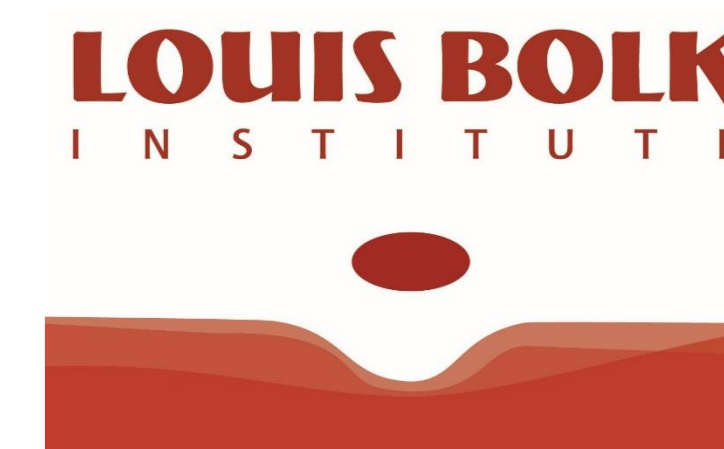


Amazing Grazing

Effect of cutting height and defoliation frequency on grass production and feeding value

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Background

- Different grazing systems have large variation in defoliation frequencies.
- Post (grazing) heights can vary from over 6 to under 3.5 cm.
- In order to measure the effect of a low and higher post grazing stubble height under different defoliation frequencies on DM yield and feeding quality a mowing experiment was conducted.

Methods

- Cutting experiment with 2 stubble heights (3 and 5 cm) and 3 defoliation schedules (every 2, 3 and 4 weeks).
- Mown with a lawn mower to obtain a short stubble
- Measurements included DM yield, crude protein, crude fiber and digestible organic matter
- Nitrogen application 345 kg N ha⁻¹ year⁻¹ (CAN)
- Results of a single year are presented (2015)



Defoliation schedule

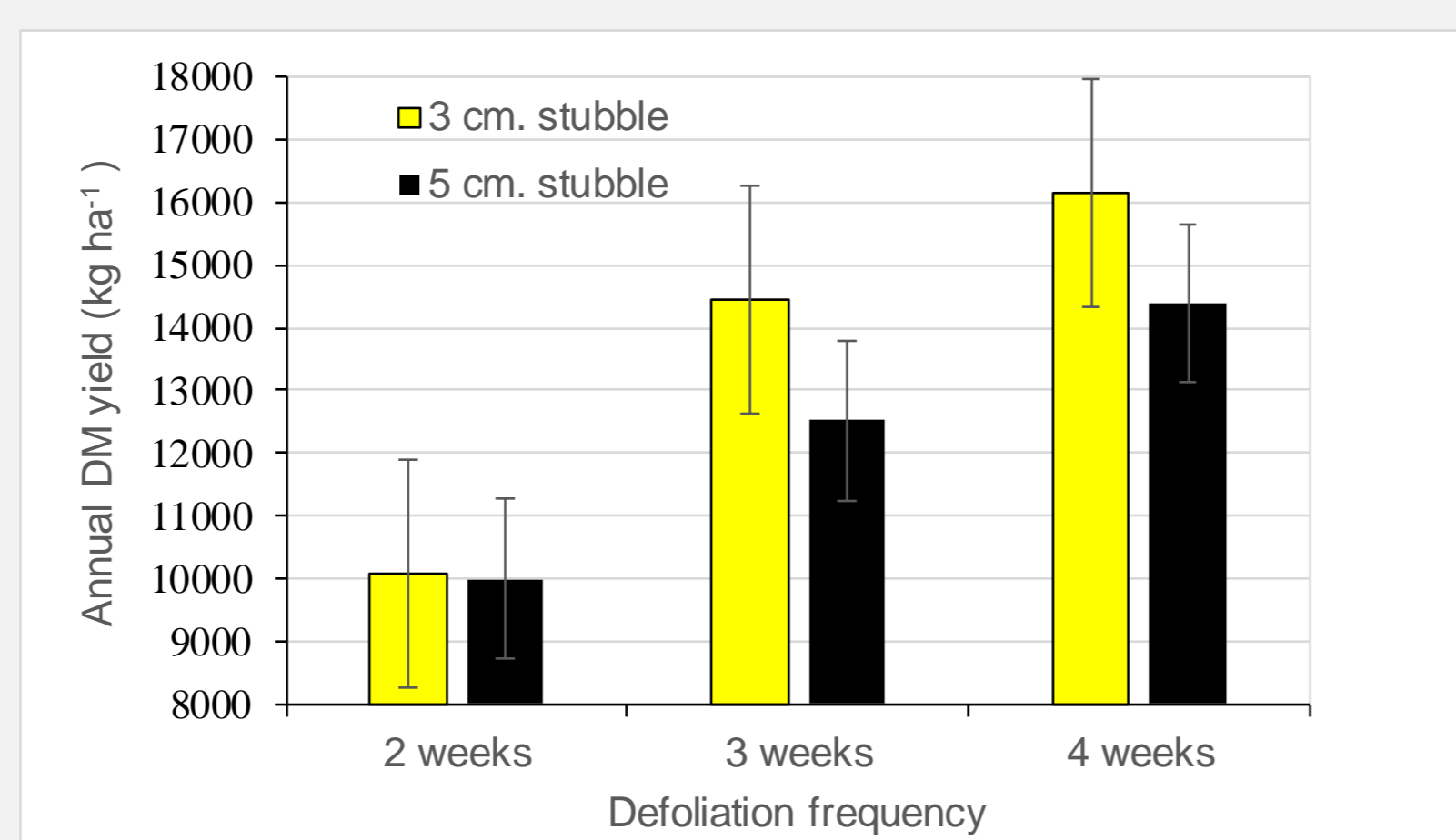
| Week | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | ... |
|---------|---|---|---|---|---|---|---|---|---|---|----|----|----|-----|
| 2 Weeks | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| 3 Weeks | X | | X | | X | | X | | X | | X | | X | |
| 4 Weeks | X | | | X | | | X | | | X | | | X | |

Mowing at different stubble heights



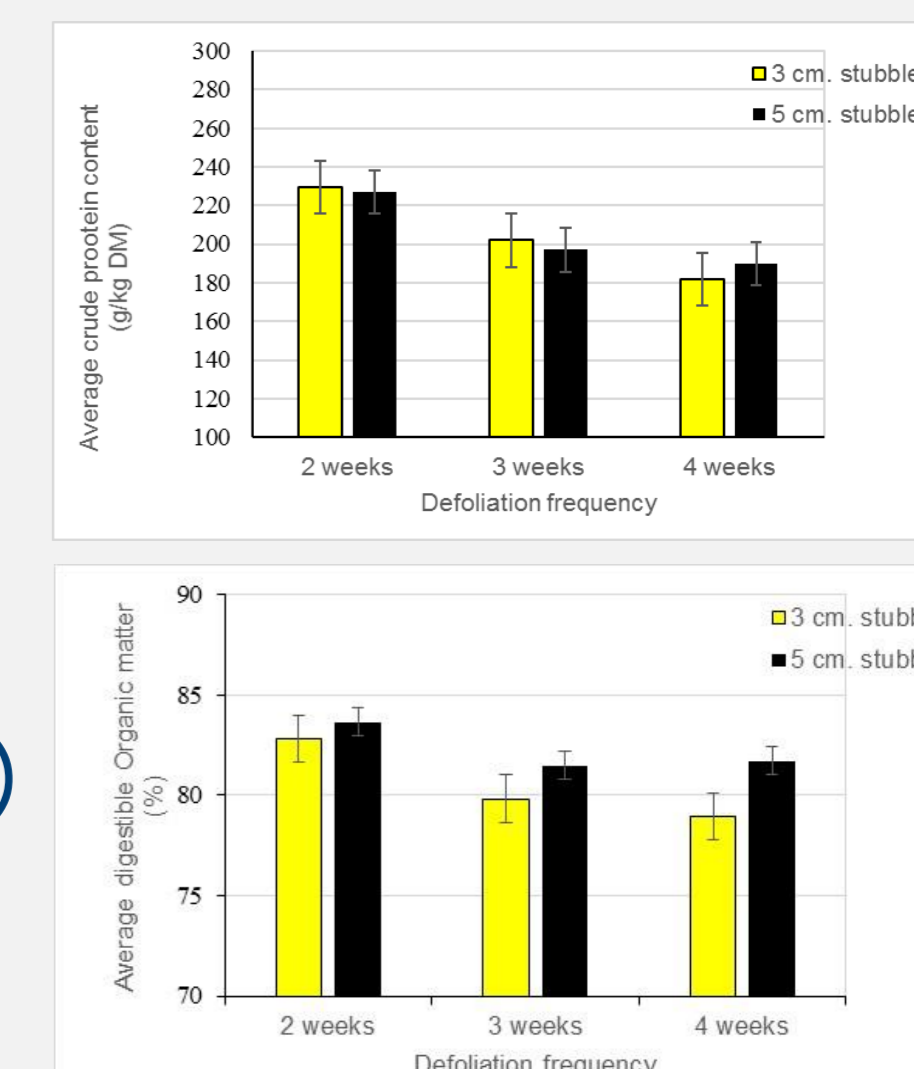
Grass production

A lower defoliation frequency combined with a short stubble height resulted in the highest DM yield.



Grass quality

- No significant effects of stubble height on crude protein or crude fiber content.
- Two weeks defoliation and a higher stubble give the (sign.) highest digestible OM, but differences are minimal.
- Four weeks defoliation resulted in (sign.) lowest crude protein.



Conclusions

- A higher defoliation frequency showed a significantly lower total DM yield, with a higher protein content and a higher digestible OM.
- The higher protein level could not compensate for the lower DM yield, so the total N yield was also lower.
- Shorter cutting heights led to a higher DM yield in combination with a 3 or 4 weeks defoliation but resulted in a slightly lower digestible OM.



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