

EFFECT OF TWO PRE-GRAZING HERBAGE MASSES AND DAILY HERBAGE ALLOWANCES ON PERENNIAL RYEGRASS SWARD CHARACTERISTICS



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I. Introduction Efficient exploitation of grazing grass will require the development of systems designed to maximise daily herbage intake per cow while maintaining high quality pasture over the grazing season. Sward characteristics are an important tool to achieve this, such as maintaining a high proportion of green leaf and low dead material within the grazing horizon and an adequate daily allowance.

II. Objective To examine the effect of two pre-grazing herbage masses (HM) and two daily herbage allowances (DHA) on perennial ryegrass sward structure across the grazing season.

III. Material and Methods Spring calving cows (n=64) randomly assigned to 1 of 4 grazing treatments (LL, LH, HL, HH) in a 2x2 factorial design (n=16), from April 9 to July 20 (PI) and from July 21 to October 31 (PII):

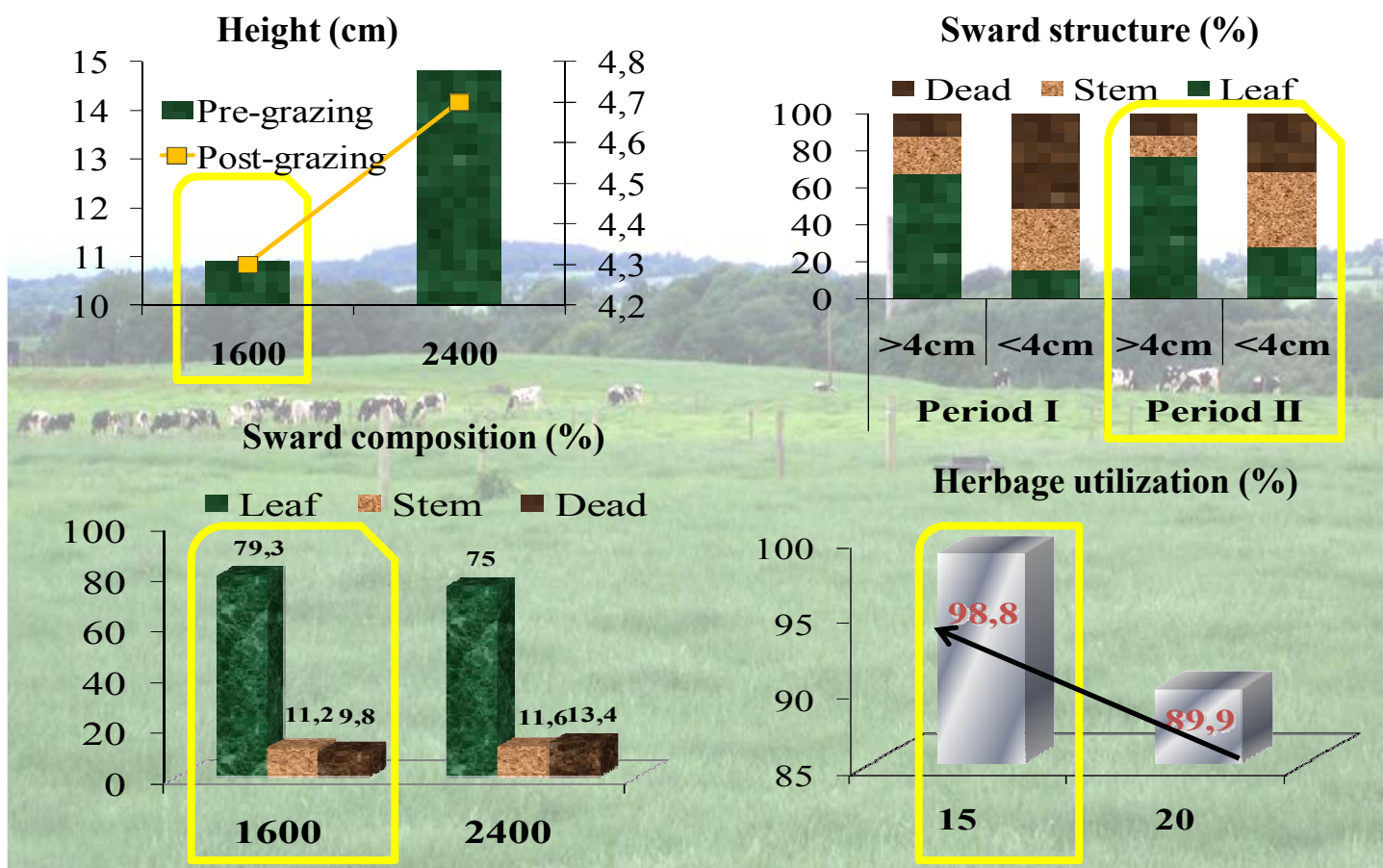
- Two HM: L, low HM (1600 kg DM/ha) and high HM (2400 kg DM/ha).

- Two DHA: L, low DHA (15 kg DM cow/day) and high DHA (20 kg DM cow/day).

Measurements: Pre- and post-grazing heights (cm) and herbage utilization (%). Leaf, stem and dead proportions (%).

Statistical analysis by ANOVA: The variables included in the model were HM, DHA and interaction between both.

IV. Results and Discussion



V. Conclusions Results show that maintaining 1600 kg DM/ha and offering cows 15 kg DM cow/day are achieved high herbage utilization rates in the early season, improving sward quality, and consequently increasing nutritive value in the mid-season compared to high HM swards.

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