

Grazing practices, perception and expectations of Walloon dairy farmers

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Abstract

The role of grasslands as a C sink is generally accepted. It is considered that permanent grasslands allow annual C storage rates between 22 and 44 g C/m²/y (Soussana *et al.*, 2010) thereby contributing to the mitigation of greenhouse gas (GHG) emissions. Grassland preservation has several other advantages including a decrease in feeding costs (Dillon *et al.*, 2005), a positive effect on cows' health (e.g. a decrease in lameness) (Burow *et al.*, 2011) and the provision of a positive image to consumers. Despite these arguments, grazing is decreasing in Europe and grasslands are disappearing. A better understanding of grazing practices and of farmers' expectations could suggest ways of improving these practices and limiting grassland disappearance. As a result, Walloon dairy farmers were surveyed in December 2015 and the preliminary results are presented below.

Keywords: *permanent grasslands, grazing, dairy industry, dairy cattle*

Introduction

Permanent grassland is considered to play a role in mitigating GHG emissions by acting as a sink for carbon. Studies have estimated that the annual C storage rates are between 22 and 44 g C/m²/y (Soussana *et al.*, 2010). Moreover, the use of grassland for grazing seems profitable because it brings about a decrease in feeding costs (Dillon *et al.*, 2005). It also has a beneficial effect on cows' health (Burow *et al.*, 2011) and is viewed positively by consumers. However, an increase in herd size and the automation of herd management have brought about a decrease in the extent of grazing and grassland area. The purpose of the Life-Dairyclim project funded by the European Commission is to describe grazing practices in the three partner countries and to monitor changes in land use. This paper presents the results from Wallonia.

Material and Methods

Eighteen questions about grazing were formulated, focusing on the description of the farms, on grazing practices and on perceptions and expectations. In Belgium, hard copies of questionnaires were sent to Walloon dairy producers by the Comité du Lait on 10 December 2015. Questionnaires were also available on the internet.

Results and discussion

Questionnaires were sent to 3,152 dairy producers and 965 completed forms were returned,

representing a 31% response. Of these, 90.5% came from conventional farms and 9.5% from organic farms, a proportion similar to that of the two systems in Belgium (Anonymous^a, 2015). A little over a third (36.4%) of the farms specialised in dairy production, 22% produced meat and milk, 13.5% produced milk and cereals and 27.9% produced meat, milk and crops. 60% of the farmers were more than 50 years old and 78% of the farms were owned by one person.

The agricultural area on 76% of the farms was less than 100 ha and 87% of the farms had less than 100 dairy cows. Milk production was below 8,000 litres per cow annually in 68% of the conventional farms and 99% of the organic farms. The producers with more than 12,000 litres represented around 1% of the farms. Holstein cows were the most common breed with an average of 78% (81% in conventional and 57% in organic farms). These figures correspond to the average farm structure in Belgium (Anonymous^b, 2015).

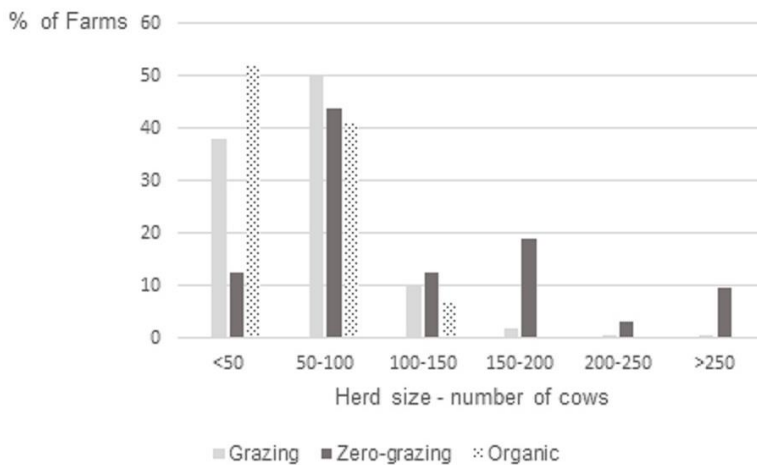


Figure 1. Number of cows per farm in different types of farm.

Grazing practice is common in Belgium (96%). In the conventional system, 79% of young animals, 98% of heifers, 96% of dairy cows and 90% of dried cows were reported as grazing. In organic farms, the proportions were as follows: young animals: 92%, heifers: 99%, dairy cows: 100% and dried cows: 97%. Compared with zero-grazing farms, grazing ones were smaller in herd size (Fig.1) and surface: only 2% of them had more than 150 cows, vs 32% (10/32) for zero-grazing herds and only 10% of grazing farms use more than 125 Ha vs 25% in zero-grazing ones. The herd size thus seems to hinder grazing.

The length of the grazing season was usually 4 months or more (96%). Most farms grazed the lactating cows day and night (74%). Supplement feed was given to the lactating cows in 99% of the farms during the grazing period. Moreover, 74.5% of the farms used supplement all the time in conventional farms, vs 37% in organic farms. Maize silage and concentrate mix were the most frequently used supplement during the grazing season (Fig. 2).

Due to this high level of supplementation, the intake of grass in summer period was evaluated at less than 50% of the total dry matter intake (TDMI) in 43% of conventional herds. Only 3.5% of farmers estimated an intake of grass of more than 75% of TDMI. In 9% of the organic farms, cows did not receive any supplement at all during the summer and 88% of the farms estimated an intake of grass of more than 50% of TDMI.

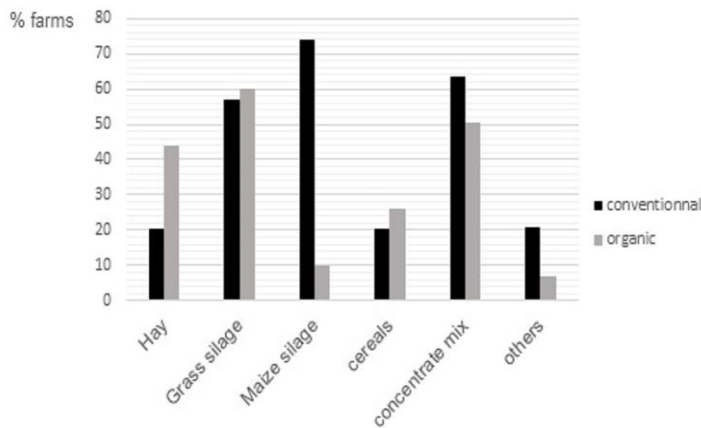


Figure 2. Type of supplementation allocated to the cows during the grazing season

The opinions about grazing depended on the type of farm. Conventional farmers considered that grazing decreased production costs (76.8% of the farmers), was beneficial for landscape (81.8%), increased animal welfare (94%) and was positive for the environment (73.7%). Their expectations were to increase grazing at 42.2% of the farms and to keep it constant (39.9%), 4.5% wanted to stop grazing and 13.4% to decrease this practice. There was greater consensus among the organic farmers: 92.1% considered that grazing decreased production costs, 99% that it was beneficial for animal welfare, 91.9% that it had a beneficial impact on landscape and environment (88.3%). For organic dairy farmers, grazing was expected to be increased (56.3%) or kept constant (38.7%). Only 3.8% of the organic farmers considered stopping grazing.

Conclusion

More than 30% of the dairy farmers answered the questionnaire. Although farmers were very positive about grazing and expected to continue with the practice, the proportion of grass in cows' feed was moderate, even during the grazing period, and a high level of supplementation of grazing cows was reported. This may suggest low confidence in grass quality and quantity. Despite a limited economic benefit due to the high supplementation level, the reasons given for retaining grazing were the reduced feeding costs and improved cows' welfare.

Acknowledgments

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