## Grassland Research Programme – Sust. Prod Systems & Systems Analysis RMIS No: 5500

*Title :* Dairy production technology in the northeast

## Abstract

Systems of milk production in Ireland are predominantly pasture-based within seasonal calving patterns. For the foreseeable future, this system is seen as the optimum system financially for most Irish dairy farmers as it maximizes the utilization of cheap pasture, reduces feed costs and leaves the most profit for any given fixed quota. The potential of Irish soils to grow grass throughout the year and success in utilizing grass are key factors affecting output and profitability of dairy production systems. In the Northeast region of Ireland, the potential grazing season is shortened due to impeded land drainage, topography, high rainfall and northerly aspect. The main focus of the Ballyhaise research programme is to develop more sustainable production systems suitable to the limitations of the region with a specific focus on grass growth and utilization. Progress in these technologies will improve the competitiveness of dairying in the Northeast region. The results of previous work indicate that the most profitable spring milk production system in Ballyhaise (in both a milk quota and non quota scenario) is where grazed grass is maximised. Some dairy producers in the region can get access to additional quota, and are limited by their dairy platform size. These farms require additional inputs to meet their feed requirements. Economic analysis shows that if concentrate supplementation could be used efficiently, allowing a higher stocking rate to be carried on the farm; this could potentially result in profits similar to pasture-based systems. The objective of this study is to assess the biological and economic efficiency of two different production systems based on differences in concentrate supplementation levels and stocking rates and to subsequently deliver robust high profit systems for dairy farmers based on both low and high levels of concentrate inclusion.

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