

Grassland Science Department

Title

An investigation of impact of swards with different sward structures and over winter grass growth on milk output, grass DM intake, rumen fermentation and methane output

Abstract

Grass breeding is increased annual grass DM production by 0.5%, the majority of the gain is been measured in plot studies with little animal influence. Ireland is now at the forefront of leading the direction of grass breeding and evaluation by adopting by applying varying economic values to herbage production across the growing season. Therefore advances in DM production should now be focussed on the periods of highest economic gain spring and autumn. A major focus of this project is to quantify the level of winter and spring herbage production of varieties from different hemispheres and understand the sward dynamics behind increasing out of season DM production. One of the major constraints in animal production is difficulty in achieving high intakes from grass based production systems. In grazing systems the animal plant interface is critical to optimize intake and thus animal performance. Sward structural differences influence green leaf proportions, herbage mass, sward density, DM yield and tiller density and can also influence the chemical composition of grass at various stages across the year.

Project Leader: Michael O'Donovan

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