

**Animal Research Programme –
Grass Growth, Sward Dynamics and Utilisation
RMIS No: 6120**

Title

Strategies to increase white clover use in intensive dairy production systems

Abstract

The Food Harvest 2020 document is forecasting a 50% increase in milk production and a 20% increase in the value of beef output. This expansion will be against a backdrop of increasing input prices and environmental restrictions (e.g. Nitrates Directive, Water Framework Directive, Kyoto Agreement, etc.). Farmers will have to become more efficient in their production systems if they are to remain viable and profitable. Incorporating white clover in to grazing swards for milk and beef production will contribute to increasing the economic and environmental sustainability of grass based production systems. Currently, there is increasing interest in the inclusion of clover in swards for milk and meat production. However, intensive dairy farmers are reluctant to include white clover in their swards due to perceived reductions in spring herbage supply for early grazing and lack of persistence of white clover. This project will identify management strategies to effectively incorporate white clover in grazed swards through the quantification of the effect of sward clover content on herbage production, intake and milk production, identification of desirable traits in both companion grasses and white clover cultivars, and the examination of the effect of fertiliser nitrogen application on sward clover content. Much of the data generated in this project will be applicable to both dairy and beef production systems and will therefore also contribute to the sustainability of these industries.

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