

Grassland Science Department

Title

The effect of tetraploid and diploid swards with and without clover inclusion on the productivity of spring milk production systems

Abstract

The utilisation of increased quantities of grazed grass at farm level will provide the basis of sustainable livestock systems that will help Ireland to achieve the 50% milk production increase targeted in the Food Harvest-2020 report. This will be achieved by increasing stocking rate, improving grassland management and increasing grass production through the identification of grass cultivars more suitable for grazing dairy cows. Recent research has indicated that grass cultivars effect milk production, as animals that grazed tetraploid produced more milk than animals that grazed diploid monocultures. These results are from component experiments and need to be extrapolated into larger systems experiments. Therefore, there is a requirement to quantify the effect of ploidy on milk production at a system level over the entire grazing season. Clover has also shown beneficial effects on grass and milk production. Cow genotype has an effect on milk production and three distinct genotypes (Holstein-Friesian (HF), HF x Jersey (J) and HF x J x Norwegian Red) will also be evaluated in this study. The objective of this study is to evaluate the effect of tetraploid and diploid cultivars with and without clover inclusion and cow genotype on the productivity of spring calving milk production systems.

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