Grassland Science Department

Title

Further development of the Pasture Profit Index: new traits, updating economic values and application of a total merit index for grass variety selection

Abstract

The application of economic values to grass varieties is a relatively new concept. In 2014 a Prototype of the Pasture Profit Index was released which presented the total economic merit of individual perennial ryegrass cultivars based on their relative performance within key production traits. It is crucial that the Pasture Profit Index evolves over time to continually identify the optimum cultivars for Irish grass based production traits. Therefore examining new traits which will further improve the index is crucial, for example quantifying the utilisation of individual cultivars and identifying the economic value of improved utilisation of individual cultivars. The requirement to validate the Pasture Profit Index remains with strong industry interest in examining cultivars under grazing animals to determine the level of differences which occur between cultivars and if the differences are present and detectable under animal grazing in a farm systems trial. The opportunity to incorporate an index ranking system for grass clover swards or hybrid swards also requires investigation to determine the consequences for Irish ruminant production systems. The sharing of data between Teagasc and DAFM has created the requirement for the development of a joint database to simplify the data sharing and analysis procedures and allow more cultivars with increased over years data to be handled in an efficient and reliable manner. This will also better enable Teagasc completed the data analysis of the DAFM variety evaluation trials in a timely manner. These objectives will be a huge asset to the Irish grassland industry to improve the selection of varieties at farm level and increase the industry confidence in the PPI and the Irish evaluation system as we move forward.

Project Leader: Michael O'Donovan

Programme/Subprogramme/RMIS Number:

AGRIP – Moorepark Grassland Science-Grass breeding (incl. establishment & renovation)-6648

Start Date: 1/1/15 **End Date:** 31/12/18