

LegumeLegacy Newsletter December 2024



The latest issue of LegumeLegacy is out now! Including field updates, news from doctoral researchers on academic secondments and a feature on 'Investigating Nitrogen Dynamics in Multi-Species Swards' there's plenty to read!

https://legumelegacy.scss.tcd.ie/news/Newsletters/Newsletter_Nov-Dec_2024.pdf

What is LegumeLegacy?

With the European Green Deal, the EU has committed to transition to carbon-neutral and sustainable systems of agriculture. LegumeLegacy aims to adapt existing mixed or ruminant based production systems, using state of the art knowledge from ecology, agronomy, statistics and other fields to minimize greenhouse gas emissions, nutrient inputs and leaching (and costs), while increasing carbon stocks, biodiversity and yield stability. To achieve this, an exceptional and distinctive strategy of LegumeLegacy includes a common experiment across multiple LegumeLegacy sites; 11 Doctoral Researchers will collaborate on the common experiment and have their own distinctive and complementary research objectives.

To develop a model system of crop rotation, in the common experiment grassland plots of varying diversity of six species (two grasses, two legumes, two herbs, selected for complementary functional traits) will be established as a grassland ley, grown, and terminated; the grassland leys will be followed by a wheat crop. The effect of the diversity of the grassland ley on the performance of the crop rotation will be evaluated by measurement of yield, quality and environmental performance. LegumeLegacy will recommend the design of grassland leys within crop rotations that optimise agronomic and environmental performance; the multisite experiment will generalise the conclusion and its implementation potential across Europe.

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