

LegumeLegacy: Doctoral Researcher Ellen Baekelmans



Ellen Baekelmans is one of two Doctoral Researchers who have been working with Cotswold Seeds as part of the LegumeLegacy project. Here, Ellen talks about her PhD research into multi species grassland mixtures in crop rotations, looking at how they affect the physical, chemical and biological properties of soil. She also talks about how working with Cotswold Seeds and FarmED has given her insight into how to engage with the general public.

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About LegumeLegacy

The EU-funded LegumeLegacy project 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, LegumeLegacy includes a common experiment across multiple LegumeLegacy sites with 11 Doctoral Researchers collaborating on the common experiment with their own complementary research objectives. To develop a model system of crop rotation, grassland plots of varying diversity of six species (two grasses, two legumes, two herbs, selected for complementary functional traits) have been established as a grassland ley which is grown, terminated and 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 then recommend the design of grassland leys within crop rotations to optimise agronomic and environmental performance.

<https://legumelegacy.scss.tcd.ie/>

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