Getting Started – Integrating high protein forage into spring grazing

- Surveys conducted as part of this project highlighted that farmers find the winter period to be the most difficult time to produce a home-grown forage protein source.
- During early lactation ewes have a high demand for high-quality forage to maintain milk supply, with their intakes of DM increasing up to 3.5% of total bodyweight.
- Sowing vetch within a short-term Italian ryegrass ley could potentially boost crude protein by up to 20%.

IBERS Research

We investigated the effects of common vetch (*Vicia sativa*), grown over the winter period, on the performance of lactating ewes with lambs at foot grazing vetch/ryegrass swards.

What we compared

- Vetch (Slovena) 25kg/ha and IRG (Dorike) 25kg/ha.
- IRG only (Dorike) 34.5kg/ha.
- Both sown mid-September and direct drilled to maintain soil structure.

How did we monitor the ewes and lambs grazing vetch?

- The previous autumn, ewes were mated with high EBV rams in 3 groups so lambs’ genetics were known.
- Lambing started from mid-April.
- Early lactation ewes with lambs at foot were placed on replicated grazing plots of each treatment.
- Ewes allocated to treatment on basis of lambing date, rams group, liveweight and boy condition.
Results

Ewe and lamb performance was closely linked to the availability of vetch within rotational grazed plots (Fig. 1) with higher liveweights found on Day 35. Vetches re-grew within rotational grazed system.

**Fig. 1. Combined liveweight of ewes with lambs at foot on each forage treatment for 6 weeks post-lambing.**

Key Findings

- Average lamb LW gain = 24g/day higher on vetch
- Average ewe LW loss = 24g/day lower on vetch

Resulted in overall benefit to livestock performance

- Ewes in early lactation need quality forage to help maintain their milk supply to lambs at foot.
- Botanical composition shows vetches grazed by ewes.
- Vetches re-grew within rotational grazing system.
- Higher combined ewe and lamb weights but only on Day 35.