ENET

Pastures for lambs

FieldLab: Forage for Optimum Resilience and Growth (FORG)



1.2.197-

Overview

Weaning shock causes physiological stress in lambs and can cause a sudden increase in worm burden. This effect can be offset by secondary metabolites in forage but also by enhanced forage protein content (Bebbington, 2023, pers comm).

Forage legumes are central to providing crude protein, and white clover is the commonly used species for this in leys but not in cover crops.

This FieldLab has tested the potential benefits of increasing the diversity and protein content of cover crops for lambs, and temporary swards for lambs. The trial mixtures were designed by DLF in collaboration with the farmer group to increase protein content and secondary metabolites.

Trial design



Each participating farmer had two fields in the trial, one for cover crops and one for temporary leys:

<u>Weaning cover crop:</u> 3 farms, each with 1 field, each field split in half. One half was forage rape (control), and the other half was the chicory, crimson clover, plantain mixture

<u>Weaning herbal leys:</u> 3 farms, each with 1 field, each field split in half. One half was standard grass clover ley (control) and the other half was the chicory-rich cover crop.

The leys were established in the spring 2024, and ready to graze at the time of weaning.

Lambs were weighed onto the field and feacal egg count recorded. The fields were strip grazed with livestock moved daily. Lambs were weighed off the field once the forage has been fully grazed and a repeat faecal egg count recorded. Lamb condition scoring was monitored during the trial, and any medical intervention carried out as standard practice.



Replicate assessments of soil health were recorded for each treatment

Seed mixtures

Cover Control (5kg/ha): Mainstar rape

Diverse cover (9kg/ha): Choice chicory (40%); Ecotain Plantain (40%); Crimson Clover (20%)

Temporary ley control (13-15kg/ha): 5% White clover blend: Ryegrass Lofa (14%), Ryegrass hybrid tetragraze (20%); Ryegrass Intermediate Agaska (14%); Ryegrass Intermediate Nolwen (15%), Ryegrass late Toddington (15%) Ryegrass late Nashota (17%)

Herbal ley (9kg/ha): Nifty intermediate perennial ryegrass (13%); Nashota late perennial ryegrass (15%); Winnetou timothy (7%); Laura meadow Fescue (10%); Red clover blend (10%); Lucerne (2%); White clover dual purpose mix (5%); Alsike clover (5%); Leo Birdsfoot trefoil (3%); choice chicory (8%); Ecotain plantain (10%); Yarrow (1%); Sheeps burnet (0.5%); Sheeps parsley (0.5%)

The latest data

	Start of trial	After grazing control	After grazing diverse cover	After grazing Herbal ley	After grazing grass control
Weight gain (kgLW/ha)		186	222	62	54
Str.	220.6	1375	2438.25	1502.5	868.5
Nem.	15.75	33.25	44.75	64.25	26
Mon.	0	0	2.5	11.25	45.25
Str. pap	0	0	0	0	0

Higher Thornton results for lamb weight gain, and egg counts {Strongyles (Str.); *Nematodirosis* spp. (Nem.); *Moniezia* spp. (Mon); *Strongyloides papillosus* (Str. pap.)







