



Multi-Species Swards Research in Ireland

Every year the number of Irish research projects examining the use of multi-species swards in agriculture grows. These projects cover a range of topics from animal performance and GHG emissions to the effects multi-species swards can have on-farm systems and the wider environment.

Already, Irish researchers have made significant contributions to the worldwide knowledge surrounding multi-species swards with published data on animal and grassland performance, drought tolerance and biodiversity.

This work, combined with the results of on-going and future work, is vital to our understanding of multi-species swards and will inform the development of management strategies to maximise the benefits a multi-species sward can have on farms across Ireland.



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The SMARTSWARD project at **University College Dublin** is following up on the exciting results of the earlier Smartgrass project by taking an in-depth look at multispecies swards in dairy and calf-to-beef systems. Some of the studies undertaken aim to shed light on managing multispecies swards in grazing systems and the effects on forage production, animal performance and sward persistence.

At **Teagasc Johnstown Castle** researchers are examining the potential environmental benefits that multi-species swards can bring to grass-based systems. From the work being carried out at Johnstown Castle it is clear multi-species swards will play a big role in helping Irish farmers adapt to a changing climate while increasing the sustainability of their farm system.

Waterford Institute of Technology is the latest research institution to begin working on multi-species swards and the regenerative approach taken by Mike Walsh and his team will look to assess all aspects of multi-species swards without the use of inorganic N fertiliser.



Multi-Species Swards



Choosing the right mixture

Multi-species swards are often thought only suitable for good quality, dry land. However, by selecting species that can better cope with wet or dry conditions, we can formulate different mixtures to suit different soil types.

A good starting point is a mixture of species that will perform on a range of soil types like perennial ryegrass, white clover and ribwort plantain. Once we have this foundation, the mixture can be tailored towards dry or wet soils.

In particularly light, dry soils, adding species like festulolium, cocksfoot, lucerne and chicory will help keep the sward productive during prolonged dry periods.

On the other hand, in heavy, wet soils, species like timothy, meadow fescue and plantain are well equipped to cope with such challenging conditions.

A mixture like DLF's 6 Species Herbal Ley is an excellent all-round mixture that should produce large amounts of quality forage across a range of soil types.

For more information on selecting the right mixture for your farm, call Thomas Moloney, DLF 087 396 1265

DLF HERBAL LAY 6-SPECIES

GRAZING

FEATURES

- Offers vitamin and mineral intakes sometimes absent from grass alone
- Trials show higher live weight gains and significant reduction in the number of faecal parasitic egg counts
- Increased production in drought periods due to deep rooting nature
- Inclusion of red and white clover increases palatability and reduces N requirement

15%	Nifty	Intermediate Perennial Ryegrass
20%	Kerry	(T) Late Perennial Ryegrass
20%	Aspect	(T) Late Perennial Ryegrass
10%	Timothy	Timothy Blend
10%	Chicory	
10%	Plantain	
7%	Red Clover	
8%	White Clover	

Six species mixtures are currently being trialled by UCD with very positive preliminary results in terms of weight gain and reduction in worm count.

This mixture contains six species, with Ryegrass species providing the yield and quality to the sward, while Chicory and Plantain add vitamins and minerals which are sometimes devoid in grass.

Clover is also included at a high rate to ensure more palatable grazing and boost weight gain.

AVAILABLE IN 12KG PACKS

Research References

Links here

- [Yield of binary- and multi-species swards relative to single-species swards in intensive silage systems – ScienceOpen](#)
- [Herbage nutritive value of binary- and multi-species swards relative to single-species swards in intensive silage systems – ScienceOpen](#)
- [Conservation efficiency and nutritive value of silages made from grass-red clover and multi-species swards compared with grass monocultures – ScienceOpen](#)
- [Grazing multispecies swards improves ewe and lamb performance | animal | Cambridge Core](#)
- [6456 Multi-species grassland swards POKiely AGRIP.pdf \(teagasc.ie\)](#)
- [The-effect-of-grazing-multispecies-swards-on-lamb-performance-and-herbage-production.pdf \(researchgate.net\)](#)
- [Higher species richness enhances yield stability in intensively managed grasslands with experimental disturbance | Scientific Reports \(nature.com\)](#)
- [Farmland ecology \(farmecol.blogspot.com\)](#)
- [Weed suppression greatly increased by plant diversity in intensively managed grasslands: A continental-scale experiment - Connolly - 2018 - Journal of Applied Ecology - Wiley Online Library](#)
- [Forage productivity, species evenness and weed invasion in pasture communities - ScienceDirect](#)
- [Herb species inclusion in grazing swards for dairy cows—A systematic review and meta-analysis - ScienceDirect](#)
- [A review of the use of chicory, plantain, red clover... - Google Scholar](#)
- [The use of legume and herb forage species to create high performance pastures for sheep and cattle grazing systems \(scielo.br\)](#)
- [Forage herbs improve mineral composition of grassland herbage - Pirhofer-Walzl - 2011 - Grass and Forage Science - Wiley Online Library](#)
- [2018-ADSS-proceedings.pdf \(australasiandairyscience.com\)](#)