



Aber HSG

Aber High Sugar Grass perennial and hybrid ryegrasses

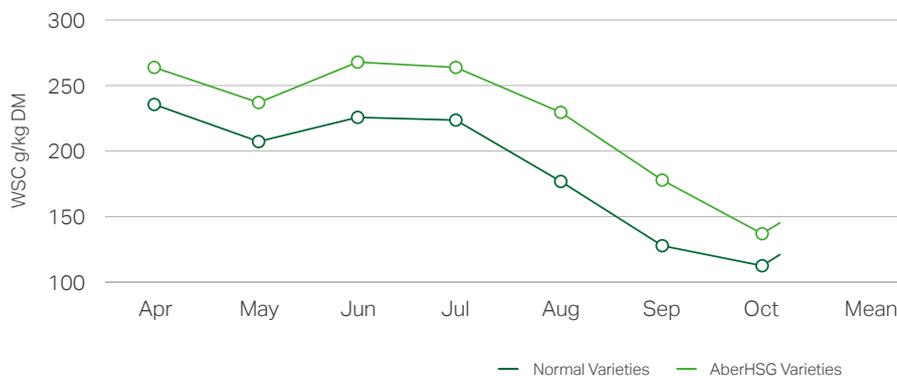
Usage Guide

Aber High Sugar Grass varieties (Aber HSG) are identifiable by the 'Aber' prefix and feature strongly in the Recommended Grass & Clover Lists. They will perform outstandingly in high performance grass mixtures for grazing and cutting, for all ruminant species.

Aber HSG ryegrasses are bred at the Institute of Biological, Environmental and Rural Sciences (IBERS) Aberystwyth University, where the ambition to achieve nutritional quality – alongside dry matter yield and strong agronomic performance – was first conceived.

The IBERS programme links grass breeding with animal performance and continues to produce new and improved varieties, year on year.

Average WSC over 5 years



Data from IBERS long term trial, average WSC over five years, seven cuts per year, three HSG varieties (AberDart, AberStar, AberMagic) and two normal varieties (Premium, Talbot).

Aber HSG – the key difference

- Contains higher levels of water soluble carbohydrate (WSC or sugar) than conventional ryegrasses
- Provides increased readily available energy to feed fibre-digesting rumen microbes
- More active rumen microbes convert more forage protein into milk or meat, with less being wasted

Aber HSG – performance benefit

- Higher dry matter yields from grazing or cutting
- Improved dry matter intakes from enhanced fibre digestion and greater palatability
- Higher milk yields or growth rates resulting from more efficient forage protein conversion



Germinal seed
Available in 5, 10 and 25kg bags.

Aber HSG – environmental benefit

- In zero-grazing trials involving early, mid and late lactation dairy cows, the amount of feed nitrogen lost in urine was reduced by up to 24% in animals fed Aber HSG
- Reduced nitrogenous waste resulting from more efficient forage protein conversion
- Lower emissions of methane, ammonia and nitrous oxide



Trial Results

Aber HSG for milk production

Accumulated studies at IBERS and on commercial dairy farms have shown that grass protein is used more efficiently when extra energy is provided by feeding Aber HSG varieties.

- 6% more milk per cow over a grazing season
- Dry matter intakes increased by 2kg/cow/day
- 3% improvement in diet digestibility

Aber HSG for beef production

Grazing trials and companion zero-grazing trials at IBERS have shown that when extra energy is provided to beef cattle by feeding Aber HSG varieties, grass protein is used more efficiently, and performance is enhanced.

- Dry matter intakes increased by 25%
- 20% high liveweight gains
- Slaughter weights reached earlier

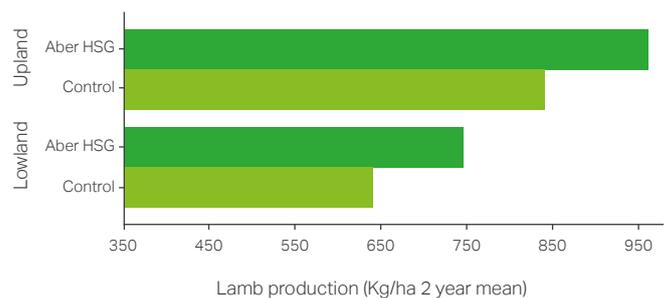


Aber HSG for lamb production

Performance in lambs grazing Aber HSG ryegrass was higher in upland and lowland situations.

- Higher forage intakes
- 20% higher liveweight gains
- 20% higher sward carrying capacity

Lamb production comparing Aber High Sugar Grass with an ordinary ryegrass



Aber HSG reduces environmental impact

Reductions in nitrate leaching (4-6%) and lower ammonia losses to the atmosphere (7-11%) contribute to a significantly lower carbon footprint when cows graze Aber HSG swards, according to the CLEANER COWS* modelling study. When combined with improved manure management the carbon footprint per litre of milk production can be as much as 40% lower.

* Soteriades, A., Gonzalez-Mejia, A., Styles, D., Foskolos, A., Moorby, J. and Gibbons, J. (2018). Effects of high-sugar grasses and improved manure management on the environmental footprint of milk production at farm level. *Journal of Cleaner Production*. 202 (1), 1241-1252.

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