



Objective: Comparing grass quality from Sweetgrass plus Se against straight nitrogen

Crop: Grass

Location: Ballantrae, Ayrshire, Scotland

Date: October 2018

Reason: NSA Scotsheep 2018

Trial code: Scotsheep

A Broad Spectrum Soil Analysis highlighted soil deficiencies of sulphur, sodium and selenium, all essential for livestock performance.

Half of Back Hill field was treated with a commodity fertiliser and the other half with Sweetgrass, a grassland fertiliser enriched with sodium.

Treatments		
	Sweetgrass	Nitrogen
Mid-Mar	Urea applied at 125kg/ha on both sides of the field	
Mid-Apr	187kg of 23% Nitrogen + 5% Sulphur + 5% Sodium + 10ppm Selenium	187kg of CAN 27% N
Early Oct	125kg of 23% Nitrogen + 5% Sulphur + 5% Sodium + 10ppm Selenium	125kg of CAN 27% N

October results after half the field was treated with Sweetgrass and half straight nitrogen

The K:Na ratio of 9:1 for Sweetgrass compared to 18:1 for straight nitrogen, and K:Mg of 14:1 compared to 20:1 would significantly reduce the risk of staggers.

The results showed a

350% increase in selenium levels

shown to give significant benefits to animal health.

Nutrient ratios	
Sweetgrass	Straight nitrogen
N:S ratio	
17:1	27:1
K:Na ratio	
9:1	18:1
K:Mg ratio	
14.1	20:1

Conclusions:

- ✓ Sweetgrass improves the taste and quality of grass for livestock
- ✓ Sweetgrass can increase live weight gain and yield output
- ✓ Sweetgrass nutrients improve animal health and save money