

EARLY SEASON GRASS REPORTS HIGHER MINERAL LEVELS

This year's grass growth has got off to a good start compared with 2013, due to the generally mild wet spring. Livestock farmers are reporting increased grass yields for 1st cut livestock. The higher growth rates of grass this season have translated through to an improved mineral profile. The key features for spring grass average mineral composition this year compared to 2013 are as follows:

CALCIUM— increased by 17 % due to more advanced growth stage and higher fibre content.

POTASSIUM—up by 6% in line with higher vegetative growth.

SODIUM—36% higher, probably due to increased application of slurry.

CATION-ANION BALANCE—increased by 14% because of higher Potassium and Sodium levels. Of no consequence to cows in milk, but will increase risk of hypocalcaemia for late spring calving herds.

IRON—reduced by 5% as better weather conditions means less soil contamination.

TRACE ELEMENTS—generally similar to 2013, although Copper is higher and Iodine lower

MOLYBDENUM—increased by 17% as this element follows Nitrogen and vegetative growth. Antagonism to Copper remains significant.

Bottom Line

Last year was a very late year for grass growth while 2014 has produced a more typical spring. As a result this season's average grass mineral status has generally reverted to the 2012 values, when similar spring weather was experienced. There are a few differences including higher values for Potassium and Molybdenum, due to better vegetative growth and a lower Iron level as soil contamination is reduced. Clearly challenges to cow health and productivity are present and these need to be addressed when formulating balancing mineral supplements for cows at grass.

GRASS MINERAL ANALYSIS (APRIL—JUNE)

Year		2012	2013	2014	% Difference 2013 v 2014
No. of Samples		147	153	140	
<i>Element (DM Basis)</i>					
Calcium	%	0.64	0.52	0.61	+17
Phosphorus	%	0.37	0.35	0.36	---
Magnesium	%	0.18	0.17	0.18	---
Potassium	%	3.09	3.03	3.22	+6
Sodium	%	0.18	0.14	0.19	+36
Chloride	%	0.91	1.00	0.96	---
Sulphur	%	0.25	0.23	0.26	+13
CAB meq/kg		+458	+412	+471	+14
Iron	mg/kg	466	285	270	-5
Aluminium	mg/kg	187	117	115	---
Manganese	mg/kg	140	131	128	---
Copper	mg/kg	11.9	8.3	9.6	+16
Zinc	mg/kg	41.0	34.2	34.9	---
Cobalt	mg/kg	0.14	0.12	0.15	---
Iodine	mg/kg	0.60	0.91	0.65	-29
Selenium	mg/kg	0.08	0.08	0.07	---
Molybdenum	mg/kg	2.41	2.36	2.75	+17