

Information Sheet

MINERAL CONTENT OF GRASS SILAGE

The mineral content in forage dry matter can vary considerably due to the following factors, some of which are inter-related.

- i) The maturity of the sward
- ii) The date the sward was cut
- iii) The level of fertiliser/manure applied
- iv) The mineral status and pH of the soil
- v) The species of grass
- vi) The legume content of the sward

It is therefore difficult to give accurate information on expected levels in grass silage. However, below are some guidelines.

		Mean	SD	Typical Range
Calcium	g/kg DM	6.4	1.9	2.5 - 10
Phosphorus	g/kg DM	3.2	0.6	2.0 - 4.5
Sodium	g/kg DM	2.7	1.6	1.0 - 6.0
Magnesium	g/kg DM	1.7	0.5	1.0 - 3.0
Potassium	g/kg DM	25.8	6.8	14.0 - 45.0
Sulphur	g/kg DM	2.4	0.4	1.5 - 3.5
Manganese	mg/kg DM	120.0	75.0	30.0 - 250.0
Zinc	mg/kg DM	34.2	10.1	25.0 - 50.0
Copper	mg/kg DM	11.8	7.6	2.0 - 30.0
Iodine	mg/kg DM	0.98	0.45	0.3 - 1.5
Cobalt	mg/kg DM	0.18	0.10	0.05 - 0.3
Molybdenum	mg/kg DM	1.2	1.09	0.5 - 4.0
Selenium	mg/kg DM	0.12	0.06	0.05 - 0.25

References:

- 1) UK Tables of Nutritive Value and Chemical Composition of Feedingstuffs
- 2) ethos Data