



Association of  
American Plant  
Food Control  
Officials

# Magruder Certificate of Analysis

## Magruder Sample #230611 Grade 15-6-12

Analyte	Value	± Uncertainty	# Labs
Ammoniacal N (%)	8.457	0.046	25
Nitrate N (%)	6.745	0.092	19
Total N (15%)	16.13	0.061	61
Total P2O5 (%)	6.403	0.070	42
Direct Available P2O5 (6%)	6.349	0.038	38
Soluble K2O (12%)	12.43	0.066	74
Acid Soluble Mg (1.3%)	1.573	0.018	55
Total S (6.3%)	6.940	0.089	46
Acid Soluble Cr (ppm)	14.56	1.46	23
Acid Soluble Cu (0.08%)	0.07876	0.00081	58
Acid Soluble Fe (0.32%)	0.3498	0.0050	61
Acid Soluble Mn (0.13%)	0.1415	0.0017	58
Acid Soluble Mo (110ppm)	126.8	3.1	35
Acid Soluble Ni (ppm)	5.019	0.577	20
Acid Soluble Zn (%)	0.08267	0.00140	57

1. Data obtained from participant results in the Magruder Check Sample Program.
2. Guaranteed concentrations noted by the value preceding the unit in Analyte name.
3. Values are robust means. Uncertainty determined as  $1.25 \times \text{robust standard deviation} / \sqrt{\text{\#Labs}}$ .  
Results only shown for analytes tested by 16 or more labs. Values and uncertainties for analytes tested by less than 16 labs are available in Analyte Reports.