

2003 North American Proficiency Testing Program 4th Quarter Report January 12, 2004

Laboratory ID

Plant	Plant	Plant	Plant								
Analysis	Units	<i>n</i>	Median	<i>MAD</i>	Lab	Median	<i>MAD</i>	Lab	Median	<i>MAD</i>	Lab
Dry Matter	%	33	94.3	0.71		92.6	0.88		93.4	0.70	
NO ₃ - N Cd Rd.	mg/kg	25	5350	515		276	47		376	35	
NO ₃ - N ISE	mg/kg	14	5705	296		405	102		524	112	
NO ₃ - N Other	mg/kg	2	5163	138		475	25		550	50	
PO ₄ - P	mg/kg	17	8516	491		960	48		2786	127	
SO ₄ - S	mg/kg	4	1818	88		438	55		1001	120	
Cl	%	21	0.34	0.03		0.25	0.06		0.16	0.05	
TKN	%	25	5.88	0.28		2.72	0.08		2.66	0.08	
N-Dry Comb.	%	61	6.37	0.063		2.77	0.07		2.71	0.06	
S-Dry Comb.	%	12	0.526	0.025		0.204	0.006		0.558	0.081	
Nitric / Perchloric Digest											
P	%	40	1.13	0.05		0.170	0.009		0.440	0.020	
K	%	43	3.99	0.17		1.96	0.06		1.67	0.09	
Ca	%	41	1.23	0.06		3.24	0.12		1.50	0.06	
Mg	%	40	0.59	0.023		0.61	0.030		0.30	0.016	
S	%	42	0.47	0.026		0.20	0.010		0.47	0.055	
Na	%	35	0.017	0.007		0.030	0.004		0.040	0.006	
Al	mg/kg	22	20.1	9.5		193	32.5		236	30	
B	mg/kg	30	31.3	3.2		37.0	1.8		38.2	2.4	
Zn	mg/kg	41	87.0	3.0		35.0	1.4		97.0	5.0	
Mn	mg/kg	40	87.0	4.0		102	5.0		126	6.5	
Fe	mg/kg	40	145	15.9		218	18.0		236	18.7	
Cu	mg/kg	41	22.0	1.0		13.2	1.2		11.6	0.7	
Mo	mg/kg	12	0.27	0.26		0.21	0.20		0.61	0.27	

1 - Values flagged exceed Warning Limits " * " 2.5 x MAD (Median Absolute Deviation) and Control Limits " * * " 4 x MAD. "<" and "ND" values not recorded.

Plant	Plant	2003-210	Plant	2003-211	Plant	2003-212		
Analysis	Units	<i>n</i>	Median	<i>MAD</i>	Lab	Median	<i>MAD</i>	Lab
Dry Ash								
P	%	34	1.14	0.07	0.166	0.006	0.440	0.020
K	%	32	3.99	0.21	1.91	0.09	1.65	0.07
Ca	%	34	1.24	0.04	3.26	0.12	1.50	0.08
Mg	%	34	0.59	0.030	0.62	0.04	0.31	0.01
Na	%	25	0.020	0.005	0.03	0.005	0.040	0.010
Al	mg/kg	10	10.3	2.0	168	11	205	24.7
B	mg/kg	34	32.4	2.2	37.7	2.3	39.0	1.8
Zn	mg/kg	34	88.0	3.2	34.1	1.0	95.3	4.7
Mn	mg/kg	34	86	4.1	101	6.3	118	9.1
Fe	mg/kg	33	141	9.0	185	18.0	189	24.5
Cu	mg/kg	33	21.8	1.4	12.5	0.90	10.9	0.91
Mo	mg/kg	3	0.70	0.41	1.81	0.61	1.10	0.55
Microwave Digestion								
P	%	17	1.16	0.10	0.171	0.011	0.441	0.011
K	%	17	4.01	0.11	1.94	0.08	1.63	0.07
Ca	%	17	1.24	0.17	3.28	0.11	1.48	0.05
Mg	%	17	0.61	0.02	0.62	0.02	0.30	0.02
S	%	16	0.48	0.016	0.20	0.010	0.52	0.027
Na	%	14	0.010	0.004	0.024	0.004	0.036	0.005
Al	mg/kg	12	24	22.3	181	32.1	245	35.9
B	mg/kg	14	32.4	2.7	38.0	2.9	38.2	2.1
Zn	mg/kg	16	87.2	1.1	36.1	2.6	96.0	2.0
Mn	mg/kg	16	91	3.7	105	3.5	123	6.7
Fe	mg/kg	16	152	17.3	207	11.0	235	20.0
Cu	mg/kg	16	22.5	1.3	13.0	1.0	11.0	0.58
Mo	mg/kg	3	0.14	0.09	0.22	0.19	0.60	0.07

1 - Values flagged exceed Warning Limits " ** " 2.5 x MAD (Median Absolute Deviation) and Control Limits " *** " 4 x MAD. " < " and " ND " values not recorded.