



2021 North American Proficiency Testing Program
Quarter 4 Plant Report - Thursday, February 3, 2022

Laboratory ID
General

Plant Analysis	Units	n	Plant 2021-210			Plant 2021-211			Plant 2021-212		
			Median	MAD	Lab ^{1,2}	Median	MAD	Lab ^{1,2}	Median	MAD	Lab ^{1,2}
Nutrient Ions											
Dry Matter (%)	%	23	95.1	0.780		94.1	0.700		94.6	0.690	
NO3 - N Cd Rd.	mg/kg	28	586	33.0		18,500	2,180		212	29.0	
NO3 - N ISE	mg/kg	3	919	93.0		18,200	2,470		299	10.0	
NO3 - N Other	mg/kg	5	570	150		16,200	3,200		200	68.0	
NH4-N	mg/kg	4	52.4	7.40		74.6	17.4		102	34.9	
PO4 - P	mg/kg	10	1,700	127		1,560	132		612	91.0	
SO4 - S	mg/kg	5	753	65.0		1,460	88.0		427	41.8	
Cl	%	22	0.493	0.028		2.76	0.220		0.245	0.049	
TKN	%	11	3.23	0.040		2.47	0.210		2.85	0.070	
N- Dry Comb.	%	67	3.25	0.060		3.57	0.080		2.78	0.070	
S- Dry Comb.	%	13	0.240	0.010		0.222	0.019		0.187	0.013	
Nitric / Perchloric											
P	%	26	0.313	0.014		0.242	0.009		0.132	0.004	
K	%	26	2.40	0.095		8.40	0.525		1.81	0.083	
Ca	%	26	0.562	0.038		2.07	0.105		3.47	0.196	
Mg	%	26	0.257	0.014		1.01	0.036		0.768	0.039	
S	%	25	0.235	0.010		0.209	0.009		0.183	0.013	
Na	%	24	0.036	0.004		0.096	0.006		0.038	0.003	
Al	mg/kg	17	92.2	7.85		150	14.0		60.3	6.63	
B	mg/kg	22	22.0	1.14		29.0	1.11		40.3	1.78	
Zn	mg/kg	26	41.1	3.00		32.3	2.67		29.0	2.67	
Mn	mg/kg	26	84.8	3.65		71.1	2.26		61.3	3.81	
Fe	mg/kg	25	172	11.0		228	31.0		92.0	7.40	
Cu	mg/kg	26	9.82	0.705		5.69	0.690		4.90	0.530	
Mo	mg/kg	8	1.10	0.080		0.360	0.133		0.204	0.112	
Nitric / Peroxide- MICROWAVE											
P	%	37	0.324	0.006		0.243	0.008		0.135	0.005	
K	%	37	2.40	0.050		8.43	0.320		1.80	0.070	
Ca	%	37	0.551	0.019		2.04	0.040		3.39	0.090	
Mg	%	37	0.250	0.010		1.00	0.037		0.750	0.030	
S	%	35	0.240	0.006		0.210	0.009		0.190	0.010	
Na	%	28	0.034	0.004		0.094	0.006		0.038	0.002	
Al	mg/kg	22	124	28.5		201	19.3		74.4	13.7	
B	mg/kg	36	22.3	1.00		29.0	1.63		40.0	1.87	
Zn	mg/kg	37	42.3	2.00		32.0	1.50		29.0	1.80	
Mn	mg/kg	36	85.0	3.19		70.0	3.00		60.4	2.13	
Fe	mg/kg	37	194	14.1		238	22.6		96.0	8.00	
Cu	mg/kg	37	9.58	0.440		5.63	0.625		5.00	0.500	
Mo	mg/kg	11	1.20	0.120		0.362	0.062		0.114	0.076	

1 - Values flagged exceed Warning Limits * * * 2.5 x MAD (Median Absolute Deviation) and Control Limits * * * 4 x MAD.
2 - Limits not compared to lab data for methods with less than 7 labs reporting.

Dry Ash

P	%	13	0.310	<i>0.010</i>	0.240	<i>0.020</i>	0.130	<i>0.010</i>
K	%	13	2.36	<i>0.100</i>	8.65	<i>0.350</i>	1.75	<i>0.070</i>
Ca	%	13	0.510	<i>0.040</i>	2.02	<i>0.130</i>	3.35	<i>0.150</i>
Mg	%	13	0.240	<i>0.010</i>	0.930	<i>0.040</i>	0.710	<i>0.030</i>
Na	%	11	0.042	<i>0.008</i>	0.110	<i>0.010</i>	0.040	<i>0.002</i>
Al	mg/kg	4	120	<i>24.0</i>	274	<i>32.6</i>	77.2	<i>20.4</i>
B	mg/kg	12	20.6	<i>0.550</i>	27.3	<i>1.64</i>	37.6	<i>1.27</i>
Zn	mg/kg	13	39.2	<i>4.86</i>	31.0	<i>1.00</i>	27.1	<i>2.67</i>
Mn	mg/kg	13	78.6	<i>5.40</i>	68.1	<i>2.94</i>	57.3	<i>2.37</i>
Fe	mg/kg	13	168	<i>23.1</i>	221	<i>36.0</i>	87.0	<i>14.1</i>
Cu	mg/kg	13	8.48	<i>1.31</i>	6.01	<i>0.910</i>	5.16	<i>0.600</i>
Mo	mg/kg	3	1.40	<i>0.000</i>	0.700	<i>0.120</i>	0.380	<i>0.030</i>

1 - Values flagged exceed Warning Limits * * * 2.5 x MAD (Median Absolute Deviation) and Control Limits * * * * 4 x MAD.
2 - Limits not compared to lab data for methods with less than 7 labs reporting.