

Analysis	Units	Bonduel, WI	Stratford, WI	Ellsworth, IA	Lincoln, NE	Analysis Description
Soil pH		x	x	x	x	1:1 Soil/Water Slurry
Buffer pH (Buffer Index)		x	x	x	x	Sikora Method
Soluble Salt	mmhos/cm			x	x	1:1 Soil/Water Slurry
Soluble Salt	mmhos/cm	x	x			1:2 Soil/Water Slurry
Cations (Ca, Mg, Na)	ppm	x	x		x	Ammonium Acetate Extraction
Cations (Ca, Mg, Na)	ppm			x		Mehlich 3 Extraction, ICP determination, expressed as Ammonium Acetate equivalent
Cations (Ca, Mg, Na)	ppm	x	x			Mehlich 3 Extraction, ICP determination, expressed as Mehlich 3 or Ammonium Acetate equivalent by request
Phosphorus	ppm			x		Mehlich 3 Extraction, expressed as colorimetric
Phosphorus	ppm	x	x	x	x	Mehlich 3 Extraction, ICP determination by request
Phosphorus	ppm	x	x		x	Bray 1 Extraction
Phosphorus	ppm			x		Bray 1 Extraction by request
Phosphorus	ppm				x	Olsen Extraction, if pH > 7.1
Phosphorus	ppm	x	x	x		Olsen Extraction by request
Phosphorus	ppm			x	x	Bray 2 Extraction by request
Potassium	ppm			x		Mehlich 3 Extraction
Potassium	ppm	x	x			Mehlich 3 Extraction by request
Potassium	ppm				x	Ammonium Acetate Extraction
Potassium	ppm	x	x			Ammonium Acetate Extraction by request
Potassium	ppm	x	x			Bray 1 Extraction
Potassium	ppm			x		Moist Soil Extraction with Mehlich 3 by request
Traces (Zn, Mn, Cu, Fe)	ppm			x	x	DTPA Extraction
Traces (Zn, Mn, Cu, Fe)	ppm	x	x			DTPA Extraction by request
Manganese	ppm	x	x			0.1N Phosphoric Acid Extraction
Zinc	ppm	x	x			0.1 N Hydrochloric Acid Extraction
Zinc	ppm			x		Mehlich 3 Extraction by request
Sulfur	ppm	x	x	x	x	Monocalcium Phosphate Extraction
Boron	ppm			x	x	DTPA Sorbitol Extraction
Boron	ppm	x	x			Hot Water Extraction
Nitrate-nitrogen	ppm	x	x	x	x	Cadmium Reduction
Ammonium-nitrogen	ppm	x		x	x	2N KCl Extraction
Organic Matter (OM)	%	x	x	x	x	Loss on Ignition (LOI)
Particle Size Analysis	%				x	Hydrometer Method
Salinity Evaluation	mmhos/cm				x	Saturated Paste Extraction
Chloride	ppm	x			x	Calcium Nitrate Extraction
Extractable Aluminum	ppm				x	Caesium Chloride Extraction
Molybdenum	ppm				x	Ammonium Oxalate Extraction
Total Carbon	%				x	Leco Combustion CN Analyzer
Total Inorganic Carbon	%				x	Leco Combustion CN Analyzer
Total Organic Carbon	%				x	Leco Combustion CN Analyzer
Total Bulk Density	g/cm ³			x	x	Oven dried, Gravimetric
Total Nitrogen	%				x	Leco Combustion CN Analyzer
Total Nitrogen, TKN	%				x	Total Kjeldahl Nitrogen Digestion

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		Bonduel, WI	Stratford, WI	Ellsworth, IA	Lincoln, NE	
pH					x	Saturated Media Extract
Electrical Conductivity (EC)	mmhos/cm				x	Saturated Media Extract
Nutrients (P, K, Ca, Mg, Na, Zn, Mn, Cu, Cl, Fe, B, Nitrate-N, Ammonium-N, and Al)	ppm				x	Saturated Media Extract
Extractable nutrients (Cu, Fe, Mn, Zn)	ppm				x	DTPA Extraction
Organic Matter & Organic Carbon	%				x	Loss on Ignition
Total Nitrogen (TKN)	%				x	Total Kjeldahl Nitrogen Digestion
Soluble P ₂ O ₅	%				x	Citric Acid Extraction
Soluble K ₂ O	%				x	Ammonium Oxalate Extraction

Plant Tissue Analysis

Analysis	Units					Analysis Description
		Bonduel, WI	Stratford, WI	Ellsworth, IA	Lincoln, NE	
Total Nitrogen (TKN)	%	x	x	x	x	Total Kjeldahl Nitrogen Digestion
Total Nitrogen	%				x	Combustion Analyzer by request
Total Nitrogen	%		x			NIR expressed as N
Total Phosphorus, Potassium, Sulfur	%	x	x	x	x	Nitric Acid-Hydrogen Peroxide Digestion
Minerals (Ca, Mg, Na)	%	x	x	x	x	Nitric Acid-Hydrogen Peroxide Digestion
Micro nutrients (Al, Mo, B, Cu, Fe, Mn, Zn)	ppm	x	x	x	x	Nitric Acid-Hydrogen Peroxide Digestion
Nitrate-nitrogen	ppm	x		x	x	2% Acetic Acid Extraction
Phosphate-phosphorus	ppm				x	2% Acetic Acid Extraction
Chloride	%	x			x	2% Acetic Acid Extraction

Manure Analysis

Analysis	Units					Analysis Description
		Bonduel, WI	Stratford, WI	Ellsworth, IA	Lincoln, NE	
Dry Matter	%	x	x			Oven dried at 70°C for 16 - 24 hours
pH		x	x			1:2 Manure/water slurry
Soluble Salts (EC)	mmhos/cm	x	x			1:2 Manure/water slurry
Total Nitrogen (TKN)	%	x	x			Total Kjeldahl Nitrogen Digestion
Total Phosphorus, Potassium, Sulfur	%	x	x			Nitric Acid-Hydrogen Peroxide Digestion
Minerals (Ca, Mg, Na)	%	x	x			Nitric Acid-Hydrogen Peroxide Digestion
Micro nutrients (Cu, Fe, Mn, Zn)	ppm	x	x			Nitric Acid-Hydrogen Peroxide Digestion
Nitrate-nitrogen	ppm	x	x			2N KCl Extraction
Ammonium-nitrogen	ppm	x	x			2N KCl Extraction
Water Extractable Phosphorus (WEP)	ppm	x				Water Extraction
Organic Matter and Organic Carbon	%	x	x			Loss on Ignition