



Cover Crop Biomass Analysis



Why test?

One of the many benefits associated with implementing cover crops is their ability to sequester nutrients out of the soil profile and recycle them back into the soil for future crops. Growers who plant green into a cover crop have noted being able to fix upwards of 100 pounds of nitrogen. But how can you measure nutrient availability to help guide future adjustments?

AgSource Laboratories cover crop biomass analysis helps quantify the amount of nutrients the cover crop was able to sequester.

Our analysis includes a measurement of N and other key nutrients taken up by the cover crop and indicates how readily available those nutrients will become in the soil for the next crop. A measure of C:N ratio is used to estimate the rate of decomposition.

AgSource's cover crop biomass report displays a complete nutrient analysis of macro, micro and secondary nutrients as well as % carbon and % dry matter.

Cover Crop Analysis Report

Submitted By:

AgSource Test Account

106 North Cecil Street

PO Box 7

Bondhus, WI 54807

Submitted For:

AgSource 800_PL1887_COVERCROP

Marketing Example

Laboratory Sample #

CB1854

Submission Sheet #

Date Received:

01/20/2021 12:00:00AM

Date Received:

01/20/2021

Sample ID: Test02

Field ID: TESTFIELD 1

Group:

WFO MACRO

Sample Stage:

Results of Laboratory Analysis, dry sample

Macronutrient Content of Forage, Nitrogen @ 100% Dry Matter

Nitrogen	N, %	1.1	Nitrogen	N	1.14
Phosphorus	P, %	0.1	Phosphorus	P2O5	0.4
Calcium	Ca, %	0.1	Calcium	Ca	0.1
Magnesium	Mg, %	0.1	Magnesium	Mg	0.1
Sulfur	S, %	0.1	Sulfur	S	0.1
Zinc	Zn, ppm	0.1	Zinc	Zn	0.1
Manganese	Mn, ppm	0.1	Manganese	Mn	0.1
Copper	Cu, ppm	0.1	Copper	Cu	0.1
Boron	B, ppm	0.1	Boron	B	0.1
Aluminum	Al, ppm	0.1	Aluminum	Al	0.1

Release of nitrogen and phosphorus are controlled by the C:N ratio of the plant matter as it decomposes. See comments below.

Carbon	C, %	45.1	Carbon	C	45.1
Dry Matter	DM, %	88.8	C:N Ratio	C:N	40.4
Total Yield			Temperature		
Forage Weight	FW, g	100.0	Forage Weight	FW, g	100.0
Area Sampled	Sq. Feet	1	Dry Biomass	100% dry	100

Cover crop residue with C:N ratio: Above 20:1 will immobilize nitrogen Below 20:1 will mineralize nitrogen

DISCLAIMER: These analyses are intended to be used as a guide only. They are not intended to be used for regulatory or legal purposes. Results are not intended to be used for regulatory or legal purposes. Results are not intended to be used for regulatory or legal purposes.

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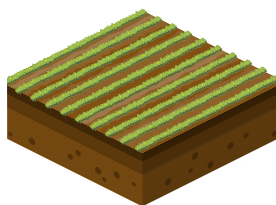
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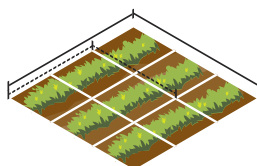
Collecting a Cover Crop Biomass Sample



When to Sample: The best time to collect a sample is just before planting or terminating your cover crop. Sample prior to a killing frost if sampling a winter killed species of cover crop in the fall.



- 1 Find a representative area of the field



- 2 Mark off an area either 2'x2' or 3'x3' – denote which is used on the submission form



- 3 Cut all the above ground cover crop plant tissue in the square, brush off any soil residue



- 4 Determine the wet weight of your sample in the field and record on the submission form



- 5 Mix up the cuttings and fill a tissue bag with 0.5-1.0 lbs. of sub sample

Shipping Instructions

1. Label the sample bag with your name and identify the sample the same as on the form.
2. Complete the entire Plant Tissue Test submission form.
3. Package and send sample to your nearest AgSource Laboratories location:

Lincoln, Nebraska

A: 300 Speedway Circle, Suite 2
Lincoln, NE 68502
P: 402.476.0300
E: lincoln@agsource.com

Ellsworth, Iowa

A: 1701 Detroit St., PO Box 247
Ellsworth, IA 50075
P: 515.836.4444
E: ellsworth@agsource.com

Bonduel, Wisconsin

A: 106 North Cecil Street
Bonduel, WI 54107
P: 715.758.2178
E: bonduel@agsource.com

Stratford, Wisconsin

A: 117609 Forward Street
Stratford, WI 54484
P: 715.687.9997
E: stratford@agsource.com