

Cover Crop Field Sampling Quick Guide

1. Sampling frame

Make a sampling frame 2' or longer on each side.

2. Field sampling

Immediately before cover crop incorporation, cut at least 5 quadrats from representative areas in the field, more if stands are uneven. Cut plants rooting within the frame at ground level and collect in bags.

3. Handling the field sample

Remove soil, break large plants and thoroughly mix the sample. Record fresh weight of the field sample to 0.1lb accuracy (oz x 0.063 = lbs).

4. Handling the subsample

Take about a 1 lb (or 1 gal) representative subsample. Send fresh sample to lab. Request % dry matter and total %N on a dry weight basis.

5. Cover Crop Calculator

Record field and lab data on the records sheet provided. Enter cover crop data in the in 'Cover Crop Analysis' worksheet. Refer to Cover Crop Calculator Quick Guide to continue.

Cover Crop Calculator Quick Guide

1. Records sheet

Collect information needed to use the Cover Crop Calculator by completing the records sheet provided.

2. Fertilizer analysis worksheet

Enter the guaranteed analysis and % dry matter for your fertilizers.

3. Cover crop analysis worksheet

Enter cover crop field and lab data.

4. Your costs worksheet

Enter your costs for managing cover crops and applying fertilizers.

5. Cost comparisons worksheet

Enter the cost of fertilizers and compare the cost of nutrients from all amendments & cover crops.

6. Nutrients provided worksheet

Enter fertilizer application rates. Review cost and nutrient values of soil amendments and cover crops to develop fertilizer plans.

RECORDS SHEET: OSU COVER CROP CALCULATOR

Information needed to use the Calculator

Information	Source of information	Units & accuracy	Your values	Calculator Sheet
Nutrients				
Nutrient requirement	Fertilizer guides and soil tests	lb/ac		Nutrients provided
Fertilizer analysis	Fertilizer label or suppliers	x.x %		Fertilizer analysis
Fertilizer % dry matter	Supplier, manufacturer or oven dry test	x %		Fertilizer analysis
Cover crop area sampled	Calculation: [size of quadrat (ft ²) x no. of quadrats sampled]	ft ²		Cover crop analysis
Fresh weight of cover crop field sample	Measured weight of field sample (oz x 0.063 = lbs; kg x 0.454 = lb; g/454 = lb)	x.x lbs		Cover crop analysis
% dry matter of cover crop subsample	Value from lab	x.x %		Cover crop analysis
Total % N of cover crop subsample	Value from lab	x.x % (dry wt. basis)		Cover crop analysis
Economics				
Fertilizer cost	Supplier	\$/lb		Cost comparisons
Seed cost	Supplier	\$/lb		Your costs
Inoculant cost	Supplier	\$		Your costs
Labor cost	Farm records	\$/hr		Your costs
Fuel Cost	Supplier	\$/gal		Your costs
Tractor size	Farm records	hp		Your costs
Implement or broadcast width	Farm records: seeders, fertilizer spreaders and tillage equipment	ft		Your costs
Speed travelled	Tractor manual (gear, rpm and wheel size conversion)	mph		Your costs