




Ohio Update

Midwest Cover Crops Council March 10-12, 2008

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OFER Organic Food & Farming Education & Research
providing education and scientific support for organic agriculture to the people of Ohio


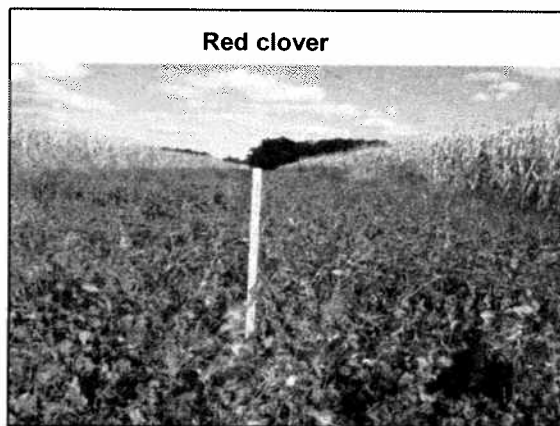
- Cover Crop Research & Education in Organic Production
- Grain, Vegetable, & Fruit Cropping Systems

At OSU, we have tested > 32 cover crops:

- Indigenous vs. exotic
- Legumes vs. non-legumes
- Summer vs. winter
- Short rotation vs. long rotation

To evaluate their suitability for:

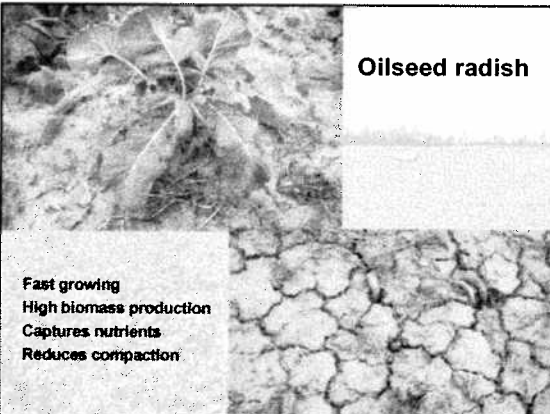
- Biomass and nutrient management
- Biomass N contribution
- Nutrient recyclers
- Other characteristics

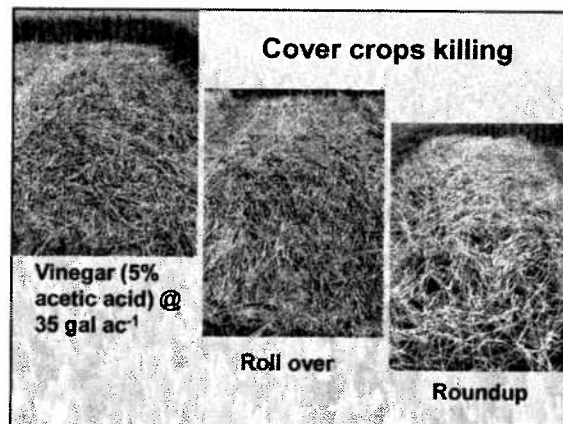
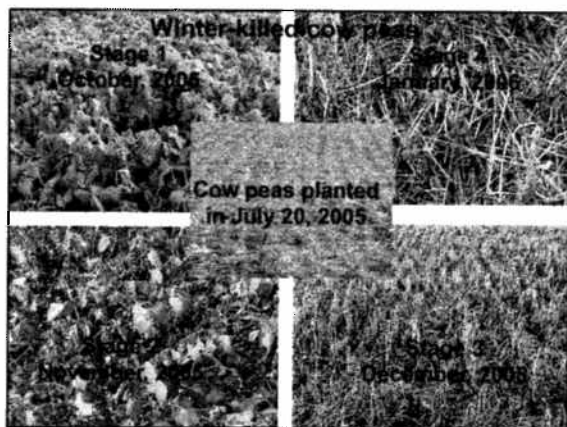
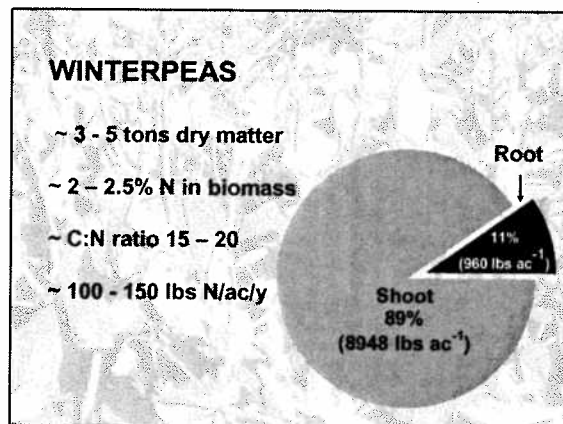
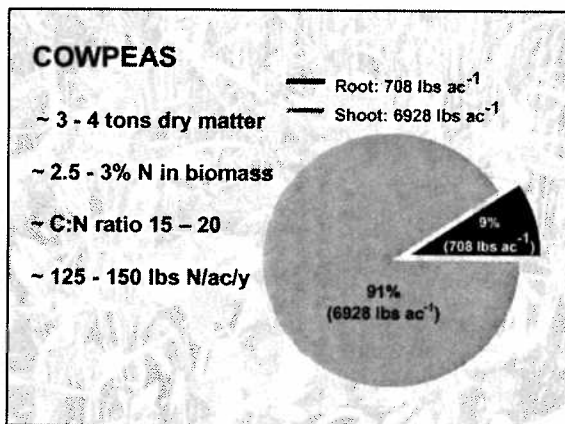
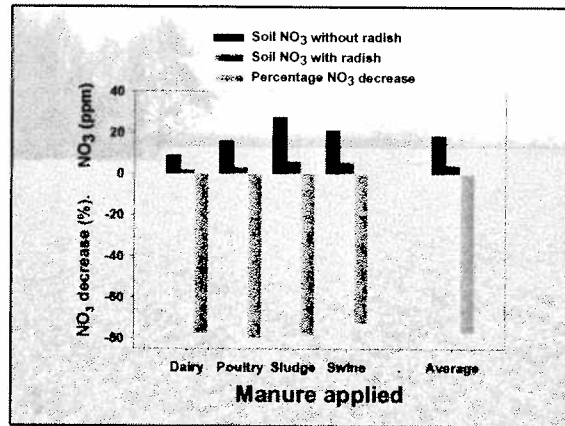
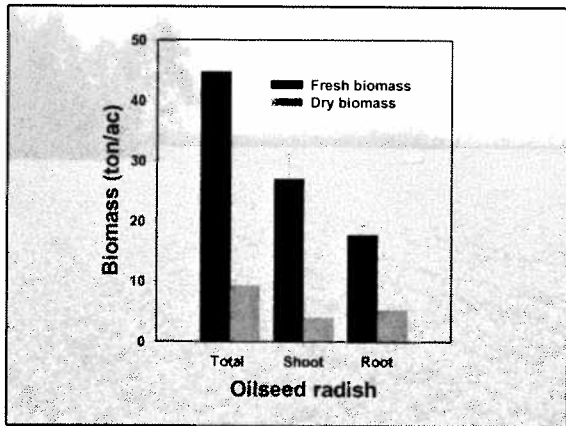
Ohio - Red Clover Research

- Dr. Robert Mullen, Soil Fertility Specialist
- Fall tillage vs. chemical kill no-till
- Nitrogen rate study
 - 0, 80, 160 lb/acre N in 3 year study
 - Biomass, Soil nitrate, and Corn yields
 - Nitrogen benefit or rotational effect?

Oilseed radish



- Fast growing
- High biomass production
- Captures nutrients
- Reduces compaction



Cowpea or winter-pea with oat ls for good silage

Winter-killed – no herbicides

Can provide up to 150 lbs of N/a

Recommendations:

30 (10) lbs cowpea/winter pea plus 65 lbs UAN/ac is good for growing corn

Making No-till Corn Work!

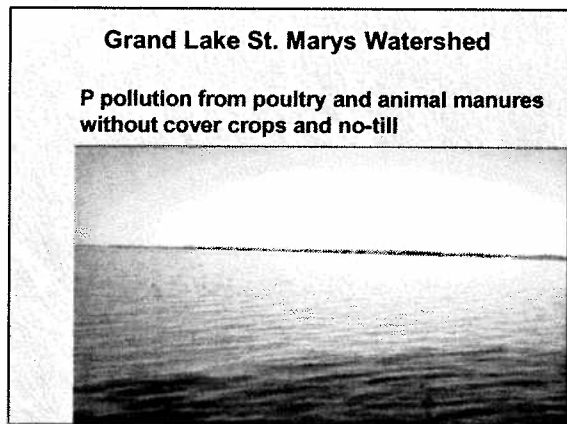
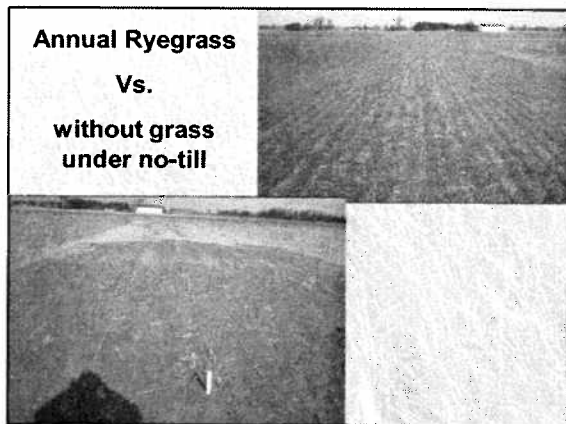
Soil N content changes with no-till

Slow nutrient release from crop residues

More and diverse microbes in soil

Building SOM (savings account of C & N)

Initially soil compaction (denitrification) moving to aerated soils (<denitrification) with cover crops and no-till



TWO LOCATIONS - REGISTER TODAY!

SOIL QUALITY WORKSHOP

MANAGING PESTS BY LINKING PLANT HEALTH TO SOIL HEALTH

SOIL QUALITY TEST KIT

A simple test for active organic matter as a measure of soil quality

		Good soil quality	Excellent quality
> 0 to 400 AOM lbs/A	> 400 - 800 AOM lbs/A	> 800 - 1600 AOM lbs/A	> 1600 AOM lbs/A
> 0 - 12 lbs available N/A	> 12 - 20 lbs available N/A	> 20 - 40 lbs available N/A	> 40 lbs available N/A

Soil quality, active organic matter (AOM), and available N color chart

**OSU Fact Sheet
Kit Order Form
CD created**

OSU South Centers at Piketon
Crop, Soil & Water Analysis

Unique Lab Services
Competitive prices

Plant, soil and water analysis

Biological analysis
Chemical analysis
Physical analysis


Cover crops in conservation practices

All Ohio Chapter Soil & Water Conservation Society

February 7, 2008

Ohio Department of Agriculture, NRCS, Farm Bureau, SWCD, Extension

CD will be created



Natural Resource Conservation Service

Conservation Practice Standard Update

Cover Crop Code 340

Mark Scarpitti - State Agronomist

Conservation Tillage & Technology Conference

1 full session on cover crops
11 cover crop presentations
768 attended
Knowledge gained 0.9 on 1-5 scale
On-farm research funded

February 21 - 22, 2008
Ada, Ohio

Attend next year
Feb. 26 - 27, 2009

