

# Manure Slurry Seeding of Forage and Cover Crops

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And

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# Goal

- ▶ Develop an integrated process that incorporates
  - ▶ low-disturbance tillage
  - ▶ manure application
  - ▶ and seeding of cover crops
- ▶ in one efficient operation



# Manure slurry-enriched seeding of cover crops



9/5/2017

# Small grain cover after corn silage



October 4

9/5/2017

# Small grain cover crop after corn silage



9/5/2017

# Manure slurry-enriched seeding of cover crops



9/5/2017

# Seed placement and emergence

- ▶ Aeration tillage creates cracks and fissures that are filled with seed-laden slurry.



# Manure slurry-enriched seeding of cover crops



9/5/2017

# Seed placement and emergence

- ▶ Variable depth of emergence from near surface to 3 or 4 inches.



# Manure slurry-enriched seeding of cover crops



9/5/2017

# Manure and cover crops: Great companions



# Fewer plants, greater biomass



Seeded  
09/01



Harvested  
12/05



9/5/2017

Daikon radish

Forage turnip

# Late season/stockpile grazing



9/5/2017

Drilled + 50 lb/ac N

Slurry-seeded

# Pasture improvement



9/5/2017

# Pasture improvement



Slurry Seed RC

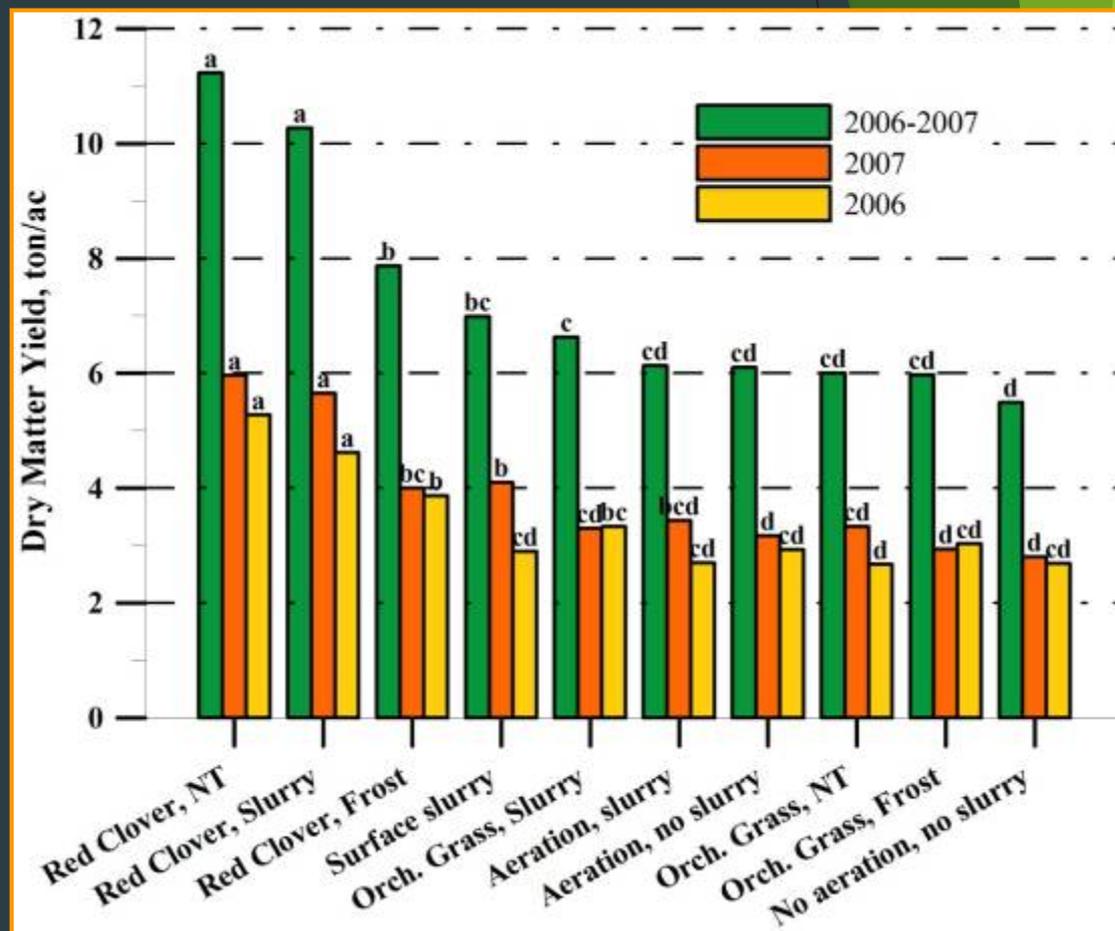


Frost Seed RC

9/5/2017

# Orchardgrass/Red Clover in Brome grass sod.

- ▶ No-till and slurry-seeded RC yield signif. greater.



# Slurry-enriched seeding is environmentally sensitive

- ▶ **Environmental benefits**
  - ▶ Conserves crop residue and improves infiltration, reduces over land flow.
  - ▶ Stabilize soil and contaminants, recycles nutrients.
- ▶ **Crop protection**
  - ▶ Natural pest suppression, reduction in pesticides.
- ▶ **Soil quality benefits**
  - ▶ Reduce tillage and traffic, organic inputs, sequester carbon, increase soil organic matter.
- ▶ **Resource efficiency**
  - ▶ Aeration tillage, manure application and cover crop seeding in one pass. Saves 2 gal/acre fuel, 0.35 h/acre labor.

