Midwestern Specific Cover Crops – What fits your operation?

# Dave Robison, Agronomist The CISCO Companies



### **assources and 50+ Cover Crop Plots** in 4 states in 2009/2010



## Austrian Winter Peas

#### <u>Disadvantages</u>

- Best to be incorporated
- Generally
   Winterkills
- Needs 5–6 weeks growth for best results
- Only one grazing/harvest can be expected

- Produces 60– 120#/acre N
- Excellent companion to Radishes and Turnips
- Generally Winterkills
- Easy to kill with herbicides



### Austrian Winter Peas



Spring 2010



Fall 2009

# Austrian Winter Peas have large nodules





# Austrian Winter Peas with Radish 2/21/11 - Mercer Co., OH





# Field Peas

#### **Disadvantages**

- Won't grow as late in season as Austrian Winter Peas
- Will not normally overwinter North of I-70

- Produces 60–120# N/ac
- Will not normally overwinter North of I-70
- Makes excellent forage
- Very good shortterm cover
- Good for weed control



## Cowpeas

#### <u>Disadvantages</u>

- Needs warm soil
- Needs good moisture
- Seed Cost
- Seems to be more reliable South of I-70
- Cannot harvest grain like soybeans

- Can produce 60– 120 # N/ac
- More reliable in summer than soybeans for nitrogen production



# **Crimson Clover**

#### **Disadvantages**

- VNS or older varieties will probably winterkill
- Some hard seed



- Can produce up to 140 units of N/acre within 90 days following wheat
- Earthworm "Heaven"
- Easy to kill
- Excellent new (early and winterhardy) varieties are available (limited supply)



# <u>Crimson Clover -2</u>



- Works very well as a companion to Radishes, Annual Ryegrass, etc...
- Deep and fibrous root system (21" deep in Fulton County, IN sp 2010)



# Earthworms love Crimson Clover roots! (April 2010 – Mason, MI)





# Crimson Clover's Fibrous roots are loaded with nodules





# Medium Red Clover

#### <u>Disadvantages</u>

 May get too tall in wheat and affect harvest



- Produces 75–100# N
- Good root systemsoil builder
- Easy to frost seed into wheat
- Often least cost cover crop
- Easily killed
- Excellent for forage



## Medium Red Clover

It is BMP to inoculate seed each year
Excellent "green manure"





# Alsike Clover

#### <u>Disadvantages</u>

- Seed Cost is generally higher than Medium Red Clover
- Not as good of forage as some other clovers



- Produces 60–125# N/Ac
- Lower growing in wheat than Medium Red or Mammoth Red Clover
- Does very well in wetter soils



### Berseem Clover

#### <u>Disadvantages</u>

- Short growing cycle
- Dies at 30–32 degrees
- Seed Cost ~
   \$50/acre



- Produces100-125#
   N/ac in 60 days
- Possibly use between wheat and other fall crop
- Good soil builder
- Excellent for green manure
- Significant forage produced



## Yellow Blossom Sweetclover

#### <u>Disadvantages</u>

- Known to be a host to soybean cyst nematode
- Little or no seed available for 2011

- Can produces 100– 200# N/ac
- Biennial
- Top legume for hot weather forage growth
- Good soil builder
- Easy to frost seed into wheat





# Hairy Vetch

#### <u>Disadvantages</u>

- Hard Seed
- Most reliable south of I-70
- Not as quick to grow in autumn as many clovers
- Seed Cost

- Produces100–200# N/ac
- Very Good soil builder
- Most of N is produced in the top growth



# **Chickling Vetch**

#### <u>Disadvantages</u>

- Seed Cost generally higher than many clovers
- Plant 2-3" deep
- Plant 50#/ac



- Produces 60–200# N/ac
- Good soil builder
- Very good for forage
- >50% of N is reportedly available for following crop



## Alfalfa

#### <u>Disadvantages</u>

- Cost for short-term cover crop is high
- May need to spray for Potato Leafhopper

- Produces 60–200# N/ac
- Excellent soil builder
- Excellent for forage
- Best used in longer term rotation
- Deep Root system





## Kura Clover

#### <u>Disadvantages</u>

- Very little seed production in the world (but we're trying!)
- Up front Seed Cost
- Spreads by Rhizome



- Perennial Clover
- Produces 100–200# N/ac
- Excellent soil builder
- Excellent for forage
- Must use in longer term rotation
- Excellent living mulch



# Where to get timely updates on cover crops?

## www.plantcovercrops.com

A cover crop blog with:
Research updates
Agronomic views on cover crops
Guides and helps
And so on...





### N-Vest<sup>®</sup> Cover Crops

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