

ILDFLOWERS • NATIVE GRASSES • FORAGES • ALFALFA • COVER CROPS • TURF • WHEAT • WILDFLOWERS • NATIVE GRAS



VAUGHN SOTHMAN

(620) 397-3745 vsothman@st-tel.net Senior Product Advisor, CCA

P ninaka

Coffee Shop Talk - Cover Crops

"They steal all my moisture... I don't have enough moisture to grow my current crop." More common - comment -"West vs. East"



EAST vs. WEST NORTH vs. SOUTH



ELEVATION DIFFERENCES



RAINFALL

Do we have enough rainfall?

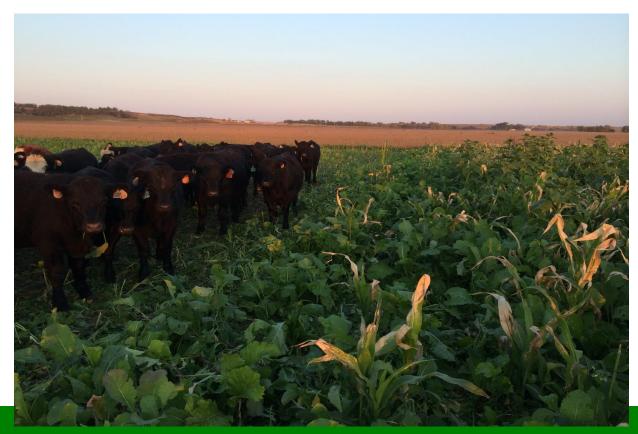
How much moisture is in my soil profile?





What Benefits Do Cover Crops Have on My Farm?

Soil Health Hard Pan Breakup Nitrogen Fixation Water Infiltration Increase Organic Matter Content Erosion Control Crop Diversity AND.....





GRAZE/HAY BETWEEN CASH GRAIN CROPS



Grasses

a surviver

Legumes

Brassicas



Cereal Grasses

- Forage Sorghum
- Sorghum Sudangrass
- Barley
- Oats
- Hybrid Pearl Millet
- Wheat
- Triticale
- Annual Ryegrass



Legumes

- Forage Peas
- Cowpeas
- Vetch
- Clovers
- High Protein Forage
- Rapid Nutrient Release
- Fixes Nitrogen In Soil



Brassicas

Cool Season Annuals
Suppress Weeds
Breakup Soil Compaction
Palatable
Nutrient Recycling
Radishes- Tillage, Grazing, Daikon
Cabbage
Mustards

Hybrid Forage Brassicas



COOL SEASON

Forage Peas Radishes Turnips Vetch Clovers Oats Small Grains

WARM SEASON

Cowpeas Forage Sorghum Sorghum Sudangrass Hybrid Brassicas (non-bolting species)



Selecting Cover Crop Mixes

Time to ask 20 questions about YOUR needs!

- When to plant?
- Cover Only?
- Grazing?
- Soil Health?
- Haying?
- Do you want mix to freeze out or over winter?





Cover Crop Mix Philosophy

- Simple cost effective mixes that work
- Less exotic mixes than some other companies, yet include grass, legume and brassica components that maximize benefits
- 4-6 species in a mix
- Willing to add more species if proven beneficial for your farm
- Brassica's are key components in most mixes
- Hybrid Brassicas are vastly superior in biomass production and have other excellent traits



HYBRID BRASSICAS

SUPERIOR BIOMASS PRODUCTION



HYBRID BRASSICAS

Leaf Size Is 2-3 Times Larger Will Not Bolt as Early When Spring Planted Multiple Regrowth Cycles



TORO RADISH REGROWTH



DAIKON RADISH

Rewlings INTERMEDIATE AGA



GRAZA GRAZING RADISH



HUNTER FORAGE TURNIP



HUNTER FORAGE TURNIP

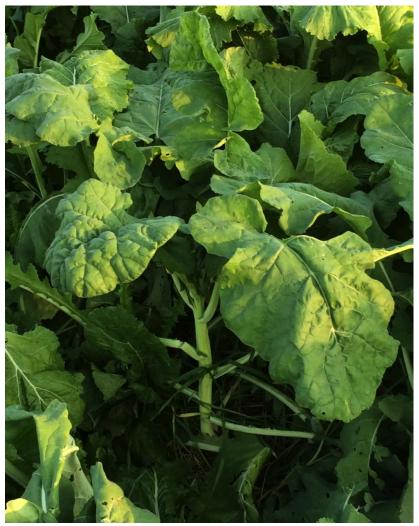




WINFRED FORAGE RAPE



WINFRED FORAGE RAPE







WHICH IS BETTER?

Which will you buy?

Daikon Radish & Purple Top Turnip

- Quick to bolt in the spring/ may bolt in the fall
- No regrowth if grazed
- Leaves are ½ the size of Hybrid Brassicas
- Cheaper seed
- May have lower quality of seed

Hybrid Brassicas

- > Will not bolt when planted in the spring or fall
- Capable of 2-3 cycles of regrowth when grazed
- More biomass
- Consistent Quality seed



Spring Mix Components

- Forage Peas
- Oats
- Hybrid Brassicas
 - Grazing Radish (if grazing)



Spring Cropper Mix 40 Lbs. Oats 20 Lbs. Forage Peas 2 Lbs. Radish 1 Lb. Forage Turnip 1Lb. Forage Rape



2015 Northwest, Kansas Irrigated



SPRING CROPPER MIX



Summer Mix Components

- Forage Sorghum or Sorghum Sudangrass (if grazing)
- Cowpeas
- Radishes
- Hybrid Brassicas



2015 Colby, Kanses Irrigated

Wheat Cropper Mix

Plant after wheat harvest

25 Lbs. Cowpeas5 Lbs. Grazex III2 Lbs. Radish1 Lb. Forage Turnip1 Lb. Forage Rape





Wheat Cropper Mix



2015 Colby, Kansas Irrigated

Fall/Winter Mix Components

Barley
Wheat
Cereal Rye
Triticale
Annual Ryegrass
Forage Rape
Radish
Forage Turnip
Sunflower





FALL MIX



2015 Great Bend, Kansas Dryland



Fall Cropper Mix Dryland

Rartially Grazed



2014 Salina, Kansas Dryland

Fall Cropper Mix Dryland

How does facultative growth habit effect triticale and barley in your grazing mixes?



Fall/Winter Mix Components

Killed By Freezing Temperatures

- Oats
- Forage Sorghum
- Sorghum Sudangrass
- Forage Peas
- Hybrid Brassicas
- Brassicas







We are leading the industry by utilizing seed coatings in the Nema Till Mix. The seed coating is designed to enhance stand establishment and improve canopy penetration when seeded aerially. The Nema Till Mix was formulated to promote bio tillage and suppress nematodes thru bio-fumigation.



- Aggressive biological tillage
- Natural biological nematode suppression
- Exceptional nutrient recycling to the soil surface
- Can be aerially applied over crops
 - Corn at black layer stage
 - Soybeans at leaf yellowing
 - Sunflowers 1 month before harvest
 - Wheat stubble
- Irrigation or precipitation shortly after seeding will greatly enhance germination





5 Lbs. **Toro Tillage Radish**

3 Lbs. **Pacific Gold Brown Mustard** - Coated

2 Lbs. **Corinne Ethiopian Cabbage** - Coated





> 14 days after seeding in northwest Kansas- Dryland





> 18 days after seeding in northwest Kansas- Dryland





Could be knee high in 30 days!

> 33 days after seeding in northwest Kansas- Dryland



COVER CROP RECAP

- Plant in a timely fashion (early August)
- > May have to aerial apply into standing crops
- Hybrid Brassicas have larger leaves, more biomass and regrowth opportunities.
- If you have livestock and plan to graze in the fall, there is a big opportunity for soil health and grazing returns.



NemaTIII MIX INTO DRYLAND WHEAT STUBBLE - AERIAL

Northwest, Kansas

FALL CROPPER MIX





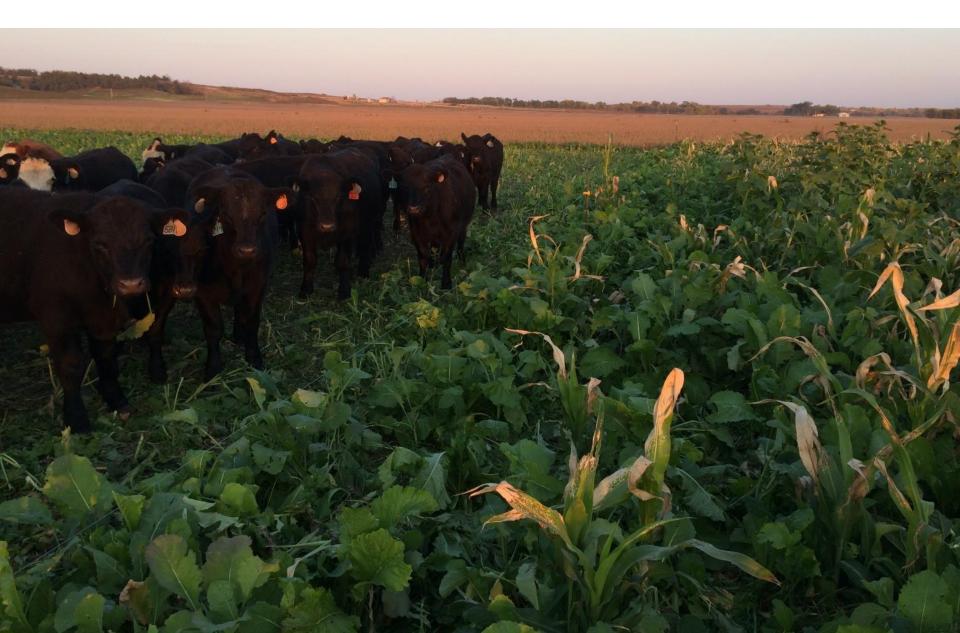
FALL CROPPER MIX INTO HAIL DAMAGED CORN - AERIAL



FALL CROPPER MIX - DRYLAND



FALL CROPPER MIX - DRYLAND



SUPPLEMENTING WITH DRY FORAGE



SYNERGY IN MIXES



MIXTURES > MONOCULTURES



What can we mix for you?



SPECIALTY MIXES



SPECIALTY MIXES



"Cover the world with cover crops.

Plant Early, plant often, use a high seeding rate and make sure it's seed from Sharp Bros. Seed Co.!"



VAUGHN SOTHMAN

(620) 397-3745 vsothman@st-tel.net Senior Product Advisor, CCA