

2019 KBS LTER Main Site

Main Cropping System Experiment

Treatment Key

- T1 Conventional corn/soybean/**wheat**
 - T2 No-till corn/soybean/**wheat**
 - T3 Reduced Input corn/soybean/**wheat** with cover crop
 - T4 Biologically Based corn/soybean/**wheat** with cover crop
 - T5 Poplar (planted in 2019)
 - T6 Switchgrass (Alfalfa from 1989-2017)
 - T7 Early Successional community
 - T8 Mown Grassland (never tilled) community
- r = replicate number

Microplot Treatment Key

- +/- Nitrogen fertilized
- Tillage (T7)
- Herbicide-free

Subplot Treatment Key

- Prairie strip (4.5 m wide)

Instrumentation Key

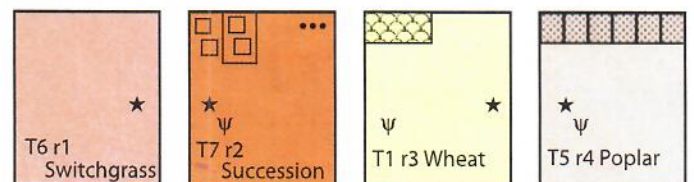
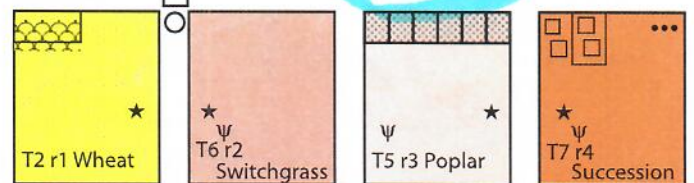
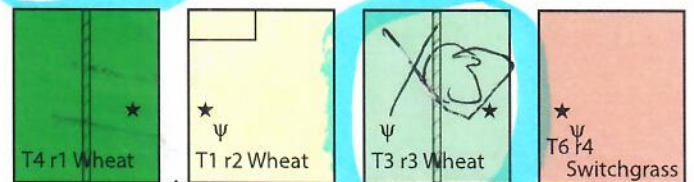
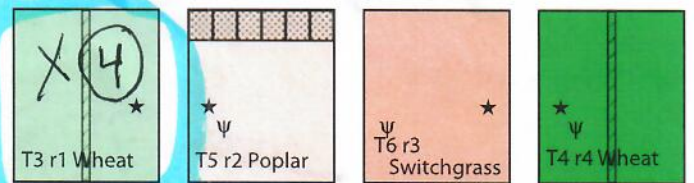
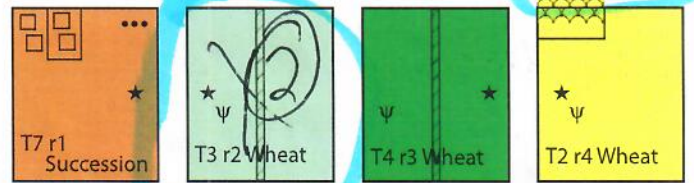
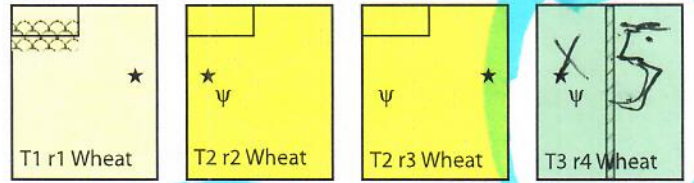
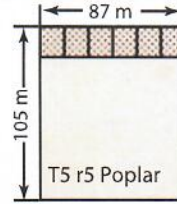
- Minirhizotrons
- ★ Trace gas flux chambers
- ψ Low tension suction lysimeters
- ⊕ Weather station & weighing lysimeter
- △ Trace gas shed
- Wireless tower & sun photometer
- ⊙ Aphid tower

Storage & Shop

Field Lab

Soil Profile Pit

8-22-19
Plant Red clover in T3 plots



40th Street

B Avenue

Main Entrance (Gate)

2019 T3 Red Clover Calibration

- JD 15' Drill w/ 24 tubes
- Test strip will be ~~300~~ 200' long
 - $200' \times 15' \text{ drill} = 3,000 \text{ sq ft}$
 - $3000 \text{ sq ft} \div 43,560 \text{ sq ft/A} = .0688 \text{ A}$
 - $.0688 \text{ A} \div 24 \text{ seed tubes} = .0028666 \text{ A per 1 seed tube}$
- Pure Live Seed Calculation (PLS)
 - $\text{PLS} = \% \text{ pure seed} \times \% \text{ germination}$
 - $\text{PLS} = 65.63\% \times 85\% = \boxed{55.78}$
 - $\text{Target Rate} = 12 \text{ lbs pure live seed per A}$
 - $12 \div 55.7\% \text{ PLS} = 12 \div .557 = 21.54 \text{ lbs/A}$
- In 200' test strip we cover .0028666 A with 1 seed tube
 - $21.54 \text{ lbs/A} \times .0028666 = .0617336 \text{ lbs}$
 - $.0617336 \text{ lbs} \times 454 \text{ grams/lb} = 28.027 \text{ grams}$
 - should collect 28.027 grams of clover from 1 seed tube in the 200' test strip.
- We averaged 28.19666 during our final two test runs and left drill setting at 6.5.

Test #	Drill Setting	2019 T3 Red Clover Calibration			Avg
		1 (weight in bags)	2 (grams)	3	
1	6	25.38g	25.67	23.39	24.81
2	6	27.54g	27.60	25.02	26.72
3	6.5	28.74	28.56	26.43	27.91
4	6.5	29.21	29.71	26.53	28.48

Driven at 4.0 mph
 Target weight 28.06 g
 Tubes 1, 2, 3 on drill



**NITRO-COAT®
MEDIUM RED CLOVER**
(VARIETY NOT STATED)

	GERM	HARD SEED	TOTAL GERM	ORIGIN OR
65.63% PURE SEED**	85%	5%	90%	
0.10% OTHER CROP				
34.17% INERT MATTER*				
0.10% WEED SEED				
NOXIOUS WEEDS: NONE FOUND				
50 LBS. (22.68 KGS.)				

TESTED: MAR. 2019
LOT NUMBER: W8-18-RC-863-CTD
AMS: 661

*INERT CONTAINS APPROX. 34.00% NITRO-COAT® COATING MATERIAL.
**COATING CONTAINS EXCEED CLOVER INOCULANT. (LOT #E703)
CLAIMED EFFECTIVE THRU DEC. 30, 2020
COATED SEED IS NOT FOR HUMAN OR ANIMAL CONSUMPTION...

THE CISCO COMPANIES
602 N. SHORTRIDGE RD
INDIANAPOLIS, IN 46219

- Nitro-Coat® Enhanced Seed Improves crop establishment in most conditions.
- Nitro-Coat® Enhanced Seed Provides better emergence, survival and more robust productive plants.
- Nitro-Coat® Enhanced Seed Contains select strains of very effective Rhizobia to increase nodulation and nitrogen fixation.
- Nitro-Coat® Enhanced Seed Plant Nitro-Coat® Enhanced Seed at the same rate per acre as non-coated seed.
- Nitro-Coat® Enhanced Seed Improves your ability to achieve maximum profitability and yield.



Warranty

Warranty: Processor warrants that the Goods consist of customer's Seed processed to Processor's specifications. Except as set forth above, there is no warranty, representation or condition of any kind, expressed or implied (Including no warranty of merchantability or fitness of Goods for any use or purpose contemplated by customer) concerning the goods or containers in which shipped and none shall be implied by law.

Caution: Heat is harmful to bacteria, store in a cool dry place. Re inoculate seed after expiration date or if seed is stored at a warm temperature. There are factors beyond our control which can affect nodulation and plant growth including the seed itself, conditions under which it is handled and stored, and conditions of the soil and climate in which it is planted. Smith Seed Services assumes no responsibility for the seed or the crop.

Notice: Nitro-Coat® is hygroscopic and will draw moisture. Treat it as you would for dry fertilizer. Do not leave in hopper overnight under conditions of high humidity.

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