

# “Permanent Plots” at the NCRS Prove Program Sustainability.

Soil test results for long-term fertilizer comparison. North Central Research Station.

		<u>ppm</u>				<u>Base saturation</u>			
		% OM	P	K	pH	CEC	%K	%Mg	%Ca
1995	whole field	2	57	138	6.6	6.6	5.3	17.6	70.1
2005	ACLF	1.8	50	150	6.6	7.3	5.3	15.3	72.9
	Conv. Liquid	1.8	51	221	6.3	8.1	7.3	13.2	69.2
	Dry	1.8	52	209	6.2	7.4	7.3	13.5	67.2
	Check	1.8	46	144	6.7	7.1	5.3	15.8	75.8

Corn:

**ACLF** Planter: 3 gal/A 9-24-3 + 5 gal/A Sure-K + 1 qt/A Micro 500; Sidedress: 33 gal/A High NRG-N

**Conv. Liquid.** Preplant broadcast: 100 lb/A 0-0-60; Planter: 7 gal/A 10-34-0 + zinc; Sidedress: 55 gal/A 28%

**Dry** Preplant broadcast: 100 lb/A 0-0-60 + 65 lb/A 18-46-0 + 345 lb/A urea + 2 lb/A zinc

Soybeans:

**ACLF** 5 gal/A Sure-K with planter

**Conv. Liquid** 100 lb/A 0-0-60 preplant broadcast and incorporated

**Dry** 10 lb/A 0-0-60 preplant broadcast and incorporated

**Check** No fertilizer

**Yields (Bu/A):**

Soybeans:	Trt. #	1996	1998	2000	2002	2004	Average
1 Liquid	2	51	31.2	42.9	46.2	48	43.9
2 conv liq	8	46.1	30.4	43.4	45	45.3	42.0
3 all dry	9	48.2	28.7	43.2	45.2	42.4	41.5
check	10	44.4	30.7	38.9	43.7	40.9	39.7

Corn:	Trt #	1997	1999	2001	2003	2005	Average
1 Liquid	2	166.9	152.4	169.4	198	153.7	168.1
2 conv liq	8	163.5	149.7	166.2	187.9	150.3	163.5
3 all dry	9	162.5	151.2	159.8	184.9	138.5	159.4
check	10	117.4	111.1	80.5	157.9	101.8	113.7

These treatments were applied to the same plots for 10 seasons in a soybean-corn rotation. Each treatment was replicated 5 times.

Data are average of 5 replications. Plot size: 10 ft x 100 ft.