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Berseem Clover Before Corn

PFI farmers were among the first to introduce berseem clover into their cropping systems. Cooperators are still examining this annual legume for its production and compatibility. **Tom and Irene Frantzen**, Alta Vista, have compared berseem and red clover for the last two years (<u>Table 1</u>). Oats has yielded better when seeded with red clover than with berseem, but the fast-growing berseem has made more straw when the oat/legume mix is baled. There was also more berseem regrowth after mowing in 1994.

The 1995 corn yielded nearly six bushels better after berseem than after red clover. But the late spring soil nitrate test showed plentiful nitrogen across the field. Tom attributes the advantage to planting conditions, explaining that the berseem left the soil in better shape than did the red clover. (Both treatments were disked before planting.) Many people have remarked that in the wet spring of 1995, planting conditions made all the difference to the success of a crop.

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Table 1. "A/B" FERTILITY TRIALS						"A/B" FERTILITY TRIALS						
COOPER-	TREATMENT "A"			TREATMENT "B"		T	RT "B"		DIFF	EREN	CE	
ATOR/ CROP	DESCRIPTION	YIELD (bu.)	TRT COST	DESCRIPTION		YIELD (bu.)	TRT COST	YIELD DIFF.	YLD LSD (bu.)	YLD SIG.	\$ BENEFIT OF TRT "A"	COMMENT
FRANTZEN/ CORN	CORN (1995) AFTER 1994 BERSEEM CLOVER	150.6	\$21.00	CORN AFTER RED CLOVER		144. 7	\$8.00	5.9	*	2.7	\$13.00	CORN PLANTING CONDITIONS WERE MUCH BETTER IN 1995
	OATS W. BERSEEM IN 1994	64		OATS W. RED CLOVER IN 1994		75						AFTER 1994 BERSEEM. LATE SPRING SOIL NO3 = 32 PPM
	OATS/BERSEEM STRAW IN 1994	30.0	BALES/ ACRE	OATS/RED CLOVER STRAW IN 1994		24	BALES/ ACRE					(HIGH). 4 REPS ONLY. BOTH TREATMENTS RECEIVED 146 LBS N. DOUBLE ROW CORN
	BERSEEM REGROWTH IN 1994 (REMOVED)	1.8	TONS/ ACRE	RED CLOVER REGROWTH IN 1994 (REMOVED)		0.75	TONS/ ACRE					BUT NOT HIGH POPULATION
FRANTZEN/ OATS	OATS W. BERSEEM IN 1995	90.2	\$20.25	OATS W. RED CLOVER IN 1995		95. 7	\$8.00	-5.5	*	4.6	(\$6.97)	\$ BENEFIT SHOWN INCLUDES
	OATS/BERSEEM STRAW IN 1995	45	BALES/ ACRE	OATS/RED CLOVER STRAW IN 1995		37	BALES/ ACRE	7.8	*	4.9	\$9.24	OAT YIELD, STRAW, AND SEED COST
MUGGE/ CORN	PURCHASED N ONLY (TOTAL OF 117 LBS N)	146.4	\$21.90	LIQUID HOG MANURE (100 LBS N) (20 LBS 28% N AT PLANTING)		142.2	\$4.8 7	4.2	N.S.	6.5	(\$17.03)	STALK NITRATE IN MANURED CORN LOW: 119 PPM. 1,300 PPM IN PURCHASED N CORN
ROSMANN/ CORN	PURCHASED CHICKEN MANURE	120.5	\$32.0 7	COMPOSTED HOG MANURE		121.5	\$16.42	-1.0	N.S.	6.3	(\$15.65)	CHICKEN MANURE (44+54+33), HOG COMPOST (14+14+19). FOLLOWING SOYBEANS
STONE CYPHE- R/ CORN	60 LBS 32% N SIDEDRESS	167.6	\$13.38	120 LBS 32% N SIDEDRESS		178.1	\$26.76	-10.6	*	9.0	(\$16.82)	LATE SPRING NO3: 11 PPM, STALK NITRATE 173 PPM (60 LBS), 447 PPM (120 LBS)
WURPTS/ SOYBEANS	BIOLOGICAL FERTILITY PROGRAM	52.6	\$8.15	ISU FERTILIZER RECOMMENDATIONS		51. 7	\$0.00	0.9	N.S.	2.0	(\$8.15)	
WURPTS/ CORN	BIOLOGICAL FERTILITY PROGRAM	139.2	\$49.61	ISU FERTILIZER RECOMMENDATIONS		138.3	\$26.76	1.0	N.S.	7.1	(\$22.85)	