Fall Legume Cover Crops

THERE CAN BE A PROBLEM OF REDUCED CROP YIELDS WHEN USING COVER CROPS IN A DRY YEAR. 1988 WAS A VERY DRY YEAR, ESPECIALLY ON THE MAY'S FARM IN SOUTHEAST IOWA. IN FACT 1987 WAS ALSO A DROUGHT YEAR. MARK WAS VERY PLEASED WITH EQUAL CORN YIELDS FOLLOWING THE HAIRY VETCH-OATS COVER CROP, CHART 18.

ALLYN HAGENSICK DID NOT INCREASE OR DECREASE SOYBEAN YIELDS WITH COVER CROPS IN NORTH CENTRAL IOWA, CHART 18. THE NEGATIVE EFFECT OF COVER CROPS ROBBING MOISTURE FROM THE MAIN CROP IS VERY REAL IN DRY CONDITIONS. WE SHOULDN'T LET ONE NEGATIVE COVER UP THE MANY POSITIVE ASPECTS OF REDUCING SOIL EROSION, REDUCING WEED PRESSURE, IMPROVING SOIL STRUCTURE BY ROOTS AND INCREASED EARTHWORMS AND CATCHING MOISTURE AND NITROGEN THAT WOULD OTHERWISE BE LOST.

MORE TRIALS ARE IN PLACE FOR NEXT YEAR TO DETERMINE JUST HOW TO MINIMIZE THE RISKS IN DRY YEARS. TWO HY-BOY APPLICATORS WILL BE IN USE NEXT FALL FOR COVER CROP EXPERIMENTS. THE GROUND APPLICATORS GIVE MORE PRECISE SEEDING FOR PLOTS THAN AIRPLANE SEEDING.

CHART -18-

1988: FALL COVER CROP TRIALS HAIRY VETCH AND OATS

SOYBEAN YIELDS BU./A.

	COVER CROP	NONE	DIFF. FROM NONE	LSD (05)	COST PER # ACRE	C.V.%
HAGENSICK	(a) 36.48 20# H.V. 32# OATS	(a) 37.48	-1.00	1.78	18.75	3.24

CORN YIELDS BU./A.

MAYS	(a) 102.47 20# H.V. 48# OATS	(a) 103.91	-1.44 ONLY 4 REPS.	31.02	13.60	13.36

P.F.I.