

FNE01-395

FINAL REPORT
2001 FARMER/GROWER GRANT

GRANT APPLICANT : CHUCK SULLIVAN (~~Fred Sullivan~~)
BROKENRIDGE FARM
CORNISH, NEW HAMPSHIRE

PARTNER FARM: JOHN LUTHER
LUTHER FARM
ACWORTH, NEW HAMPSHIRE

GRANT PROJECT: Intercropping Winter Rye With 12" Corn Silage Crop

We started planting corn on May 18, 2001 and completed the planting on June 10, 2001. Brokenridge Farm planted a total of 97 acres and the Luther Farm planted 35 acres. We sprayed the corn for weed control on June 7, 2001 using Bicept II Mag. 1.8 quarts per acre, Dual II Mag. ½ pint per acre and Accent 2/3 oz. per acre. We had good weed control on land that did not receive manure. Land with manure had some weeds. Brokenridge Farm spread the Winter Rye/Urea mix on July 11, 2001 and Luther Farm's spread it on July 4, 2001. The mix was spread on our corn at the rate of 100 pounds of Winter Rye per acre and 300 pounds of Urea per acre. Brokenridge Farm spread 48 acres of Winter Rye/Urea mix and Luther Farm spread 35 acres of Rye/Urea mix on highly erodible soils. Brokenridge Farm also spread 16 acres of just Winter Rye at 100 pounds per acre, (these costs were not included in the grant). The Winter Rye/Urea mixture was spread when corn was 12 inches tall using Agway tow behind spreader that fit in between the corn rows. The Winter Rye seed and Urea was premixed at Agway and delivered to farms in large bulk bags.

We had a dry summer but enough rainfall to keep corn growing well. Harvesting started September 26, 2001 and was completed October 19, 2001. The crop harvest was average – about 18 tons per acre. During the season there was no sign of the Winter Rye. Ten days after harvest some winter rye came up, mostly on the land that received liquid manure.

All in all this experiment did not work as everyone thought it would and we can't recommend others try it. After spreading the Winter Rye/Urea mix we looked on the ground and saw a good distribution of seed and fertilizer. The Winter Rye did not germinate though. Even after harvest there was no significant germination of Winter Rye on either farm. Some Winter Rye did come up, but it was not dense and came up mostly where we had spread liquid manure.

Cooperative Extension came to both farms and couldn't figure what had gone wrong. At Brokenridge Farm we spread the Winter Rye/Urea mix during a rainstorm. Luther's Farm spread during the day and it poured that night some 2 to 3 inches. Stefan Seiter of UNH Cooperative Extension thought that maybe the urea burned. Luther's Farm did not apply the mix during the rain and they still did not get a stand of Winter Rye. Extension folks also thought that the summer may have been too dry or that the seed did not have good contact with the soil. Extension suggested that maybe we should drive over the fields after spreading the mix so that the seed would be pushed into the soil slightly.

We had planned to have the vocational school check germination, but there was no sign of Winter Rye seed germination. We also planned to produce a brochure on the trial seeding, but, obviously that will not be done.

We planned to write another grant to try things differently next year, but things got busy and there was confusion about who was going to write it. We may try things differently next year on our own. If so we will let you know what happened.

Below are figures for the implementation of the seeding project.

BROKENRIDGE FARM

Winter Rye = \$ 486.75
 100 lb/Ac x 59 Ac. = 5,900 x .0825 /lb
 (Original estimate for Rye was \$20.00/lb – Actual Cost \$.0825 /lb.)

Land Rental 59 Acres x \$30.00/ Ac. = \$ 1,770.00
Spreader Rental @ \$25.00/Day x 2 days = \$ 50.00
Equipment Operating Expense = \$ 400.00
 (\$25.00/hr) x (16 hrs) = \$ 400.00

LUTHER FARM


Winter Rye 100 lb/Ac x 35 Ac. = 3,500 x .0825 /lb = \$ 288.75
 (Original estimate for Rye was \$20.00 /lb – Actual Cost \$.0825)

Land Rental 35 Acres x \$30.00/ Ac. = \$ 1,050.00
Spreader Rental @ \$50.00/ Day = \$ 50.00
Equipment Operating Expense = \$ 200.00
 (\$25.00/hr) x (8 hrs) = \$ 200.00

BREAKDOWN	BROKENRIDGE FARM	LUTHER FARM	
Cost of Winter Rye Seed	\$ 486.75	\$ 288.75	= \$ 775.50
Cost of Land Rental	\$ 1,770.00	\$ 1,050.00	= \$ 2,820.00
Cost of spreader Rental	\$ 50.00	\$ 50.00	= \$ 100.00
Equipment Operating Expense	\$ 400.00	\$ 200.00	= \$ 600.00
Total Grant Reimbursement			= \$ 4,295.50 Reimbursement
<i>Urea, Labor & Equipment</i>	\$ 2,542.75	\$ 1,868.75	= \$ 4,482.75 Match
<i>Urea</i>	<i>Brokenridge Farms (300 lbs/ac) x (59 ac) x (\$0.1475/lb)</i>		<i>= \$ 2610.75</i>
	<i>Luther's Farms (300 lbs/ac) x (35 ac) x (\$0.1440/lb)</i>		<i>= \$ 1512.00</i>
<i>Labor</i>	<i>Brokenridge Farms (\$15.00/hr) x (16 hrs)</i>		<i>= \$ 240.00</i>
	<i>Luther's Farms (\$15.00/hr) x (8 hrs)</i>		<i>= \$ 120.00</i>

The trial did turn out like we hoped, but nothing was lost as we received a good corn crop.

Thank-you


 Fred Sullivan
 Brokenridge Farm
 Cornish, NH