



High Plains Ag Lab, Sidney

2022 Spring Cover Crop Variety Trial (Rainfed)

UNIVERSITY of NEBRASKA
LINCOLN

Type	Species	Variety	Biomass (tons/acre)	Std err	N (lbs./acre)	Std err	C:N ratio	Std err	CP (%)	Std err	TDN (%)	Std err	ADF (%)	Std err	RFQ (%)	Std err
Grasses																
1	Spring forage barley	Lavina	0.46	0.05(4)	62	10(4)	12	0.8(4)	20	1.5(4)	73	2.0(4)	26	1.8(4)	154	11(4)
2	Spring barley	Robust	0.41	0.11(4)	69	23(4)	11	0.8(4)	23	2.1(4)	76	2.1(4)	24	1.9(4)	135	13(4)
3	Winter barley	P919	0.32	0.03(4)	50	10(4)	11	0.7(4)	23	1.6(4)	79	1.6(4)	21	1.4(4)	157	13(4)
4	Spring oats	Goliath	0.26	0.07(4)	37	10(4)	12	0.8(4)	23	1.7(4)	78	1.7(4)	21	1.5(4)	166	10(4)
5	Spring oats	Hayden	0.40	0.07(4)	60	11(4)	11	0.3(4)	23	0.5(4)	77	0.4(4)	22	0.3(4)	151	8(4)
6	Spring oats	Jerry	0.58	0.06(4)	85	14(4)	12	0.9(4)	22	1.7(4)	81	1.4(4)	19	1.2(4)	166	11(4)
7	Spring triticale	Surge	0.43	0.14(4)	61	23(4)	12	0.5(4)	21	1.5(4)	73	2.6(4)	26	2.3(4)	141	11(4)
Legumes																
8	Spring pea	Pea4010	0.62	0.07(4)	121	12(4)	8	0.3(4)	29	2.0(4)	75	3.4(4)	25	3.0(4)	71	7(4)
9	Winter pea	Survivor	0.36	0.07(3)	71	19(3)	9	0.3(3)	29	2.8(3)	74	6.2(3)	25	5.5(3)	76	6(3)
10	Winter pea	WyoWinter	0.18	0.03(4)	35	9(4)	9	1.1(4)	32	1.2(4)	78	1.9(4)	22	1.7(4)	70	10(4)
11	Faba bean	Petite	0.15	0.04(4)	22	5(4)	9	0.2(4)	26	1.0(3)	66	3.3(3)	32	2.9(3)	61	8(3)
Brassicas																
12	Rapeseed	Bonar	0.38	-(1)	72	-(1)	9	-(1)	27	-(1)	75	-(1)	24	-(1)	134	-(1)
13	Rapeseed	Barsica	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Collard	Impact	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Two-way mixture																
15	Oat+Pea	Goliath+4010	0.40	0.04(4)	66	10(4)	10	0.7(4)	24	1.1(4)	75	1.2(4)	24	1.1(4)	145	12(4)
16	Oat+Pea	Hayden+4010	0.55	0.08(4)	92	18(4)	10	0.7(4)	25	1.7(4)	76	1.1(4)	23	1.0(4)	131	13(4)
17	Triticale+Pea	Surge+4010	0.40	0.02(4)	64	3(4)	10	0.3(4)	25	0.7(4)	76	1.0(4)	23	0.8(4)	130	5(4)
Three-way mixture																
18	Barley+Pea+Rapeseed	Lavina+4010+Barsica	0.37	0.06(4)	69	11(4)	9	0.4(4)	29	1.3(4)	78	0.7(4)	22	0.6(4)	89	15(4)
19	Oat+Pea+Rapeseed	Goliath+4010+Barsica	0.30	0.03(4)	52	5(4)	10	0.3(4)	26	0.9(4)	76	2.5(4)	23	2.2(4)	126	11(4)
20	Triticale+Pea+Rapeseed	Surge+4010+Barsica	0.38	0.03(4)	69	7(4)	9	0.4(4)	27	0.8(4)	77	1.2(4)	22	1.1(4)	108	12(4)

N: Nitrogen; Std err: Standard error; C: Carbon; CP: Crude Protein; TDN: Total Digestible Nutrients; ADF: Acid Detergent Fiber; RFQ: Relative Forage Quality

The value in parenthesis in standard error column indicates the number of reps used to calculate standard error for each corresponding parameter on the left column.

Management details

Cooperator/site:	HPAL/Cheyenne County
Soil type:	Keith silt loam
Planting date:	March 04, 2022
Seeding depth:	1"
Soil moisture at planting:	Fairly dry
Implement/tools:	DCS research drill
Rows/plot:	6
Row spacing:	10"
Plot length:	30'
Alley width:	3'
Tillage:	No-till
Previous crop:	Sunflower
Pre-plant herbicide:	Fall glyphosate (32 oz)
Fertilizer at planting:	None
Irrigation:	Non-irrigated
Total precipitation during growing period:	3.7"
Termination date:	May 25, 2022