

SEEDING INFORMATION

NON-FORAGE BENEFITS

NUTRITIONAL VALUE INFORMATION (VALUES VARY GREATLY DEPENDING ON MATURITY)

ANNUAL COVER CROP FORAGE	PLANTING SEASON				CARBON/NITROGEN RATIO (C:N)	SEEDING INFORMATION				NON-FORAGE BENEFITS (5 = EXCELLENT, 1 = POOR)										NUTRITIONAL VALUE INFORMATION (VALUES VARY GREATLY DEPENDING ON MATURITY)																	
	SPRING	SUMMER	LATE SUMMER	FALL		SEEDING RATE (DRILL) LBS/ACRE	SEEDING RATE (MIX) LBS/ACRE	SEEDING RATE (FOR FORAGE) LBS/ACRE	SEEDING DEPTH (WITH DRILL)	SEEDS/LB	SEEDING TIME	BULK DENSITY* LBS/FT³	AERIAL SEEDING RATE	GERMINATION SOIL TEMPERATURE (DEGREES FAHRENHEIT)	USDA HARDINESS ZONE	DAYS TO EMERGENCE	NITROGEN FIXES OR SCAVENGES	COMPACTION ALLEVIATION	WEED SUPPRESSION	BIOMASS PRODUCTION	EROSION CONTROL	DISEASE/PEST CONTROL	POLLINATOR/BENEFICIALS	P & K CYCLING	EASE OF ESTABLISHMENT	CRUDE PROTEIN	NET† MCAL/LB	ADF‡	NDF‡	TDN	DM TONS PER ACRE	DAYS TO 1ST HARVEST	DAYS TO NEXT HARVEST	GRAZE	BALEAGE	CHOP	
Camelina (Winter)		✓	✓		20:1 - 30:1	4-6	1-2	0	¼"	400,000	0	8-10	36°	3	7-10	Scavenger	4	5	3	4	3	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0
Daikon Radish		✓			Tops - 9:1	3-8	1-3	5-8	¼"	30-40,000	44	3-8	45°	9	3-5	Scavenger	5	5	4	4	3	2	4	5	18	0.73	26	21	70	2-4	45	0	+++	0	+		
Oilseed Radish		✓			Tops - 9:1	8-12	3-8	8-12	¼"	30-40,000	44	6-12	45°	9	3-5	Scavenger	4	5	4	4	3	3	4	5	18	0.73	26	21	70	2-4	45	0	+++	0	+		
Turnips (Top)		✓			Tops - 9:1	2-6	2-4	3-8	¼"	220,000	45	2-6	45°	6-7	4-10	Scavenger	3	5	4	3	3	3	3	5	16	0.70	23	20	69	2-5	60-80	0	+++	0	+		
Vivant Brassica		✓	✓		10:1 - 15:1	4-6	2-3	5-6	¼"	165,000	44	5-6	45°	7	4-6	Scavenger	3	4	4	3	3	3	3	5	14	0	23	22	78	2-5	35-40	25-30	+++	++	+		
Forage Collards	✓	✓	✓		15:1 - 25:1	5-12	1-4	10-12	¼" - ½"	175,000	44	8-12	40°	5	4-10	Scavenger	3	4	4	4	3	3	3	5	20	0.74	25	21	70	2-4	35-40	25-30	+++	0	+		
Rapeseed	✓	✓			20:1 - 22:1	4-6	2-4	6-8	¼" - ½"	145,000	45	5-8	41°	5	4-10	Scavenger	5	3	4	4	4	4	4	5	14	TBD	28	41	57	1.5-4	60-80	0	+	++	+++		
Yellow/White Mustard	✓	✓			20:1 - 30:1	6-15	2-5	0	¼" - ¾"	100,000	46	10-15	40°	7	5-7	Scavenger	4	3	4	3	4	5	3	5	0	0	0	0	0	0	0	0	0	0	0	0	
Crimson Clover	✓	✓			15:1 - 20:1	10-15	4-8	6-15	¼"	150,000	52	6-15	42°	7	7-10	Fixer	2	4	3	3	3	3	3	4	17	0.56	31	42	59	.5-2	60	0	++	+++	+		
Berseem Clover	✓	✓			15:1 - 20:1	8-20	5-10	15-20	¼"	150,000	52	6-15	40°	8	5-8	Fixer	2	4	3	4	1	3	4	4	18	0.73	23	36	69	1-2.5	60	0	+	+++	++		
Balansa Clover	✓	✓			15:1 - 20:1	3-6	1-4	3-6	¼"	500,000	56	3-6	40°	5	14	Fixer	3	4	4	4	3	5	3	4	16	TBD	31	45	65	1-4	40-50	0	++	+	+++		
Winter Hairy Vetch	✓	✓	✓		10:1 - 15:1	15-30	10-20	30-40	1"	16,000	52	NR	60°	3-4	14	Fixer	3	4	4	3	3	5	4	3	26	0.58	33	48	64	1-3	Spring	0	+++	0	+		
Sunn Hemp	✓	✓			18:1 - 29:1	15	5-8	5-15	½" - 1"	15,000	0	NR	65°	Frost	3-7	Fixer	2	4	5	3	3	4	3	3	25	Varies Greatly				1-5	40-45	0	+++	+	++		
Austrian Winter Peas	✓	✓	✓		15:1 - 20:1	30-80	10-30	40-60	1"	2,000	52	NR	41°	6+	9	Fixer	2	4	3	3	3	4	2	4	28	0.60	38	54	70	0.5-2	Spring	0	++	+	+++		
Peas (Hay)	✓	✓			20:1 - 25:1	75-120	10-50	75-120	1"	3,000	50	NR	41°	Frost	9	Fixer	2	4	3	3	3	4	2	4	10	0.60	52	62	60	1.5-3	60-80	0	++	+	+++		
Peas (Silage)	✓	✓			Pea Straw - 29:1	75-120	10-50	75-120	1"	3,000	0	NR	41°	Frost	9	Fixer	2	4	3	3	3	4	2	4	16	0.58	44	55	58	1.5-3	60-80	0	0	+	+++		
Peas and Oat Mix	✓	✓	✓		0	75-120	0	75-120	¾" - 1"	Varies	0	NR	41°	Frost	5-9	Both	2	4	4	4	3	3	3	4	17	0.57	30	57	59	3-5	60	0	++	+	+++		
Medium Red Clover	✓	✓	✓		12:1 - 16:1	8-12	6-8	8-12	¼"	270,000	48	4-10	41°	4	7-10	Fixer	4	4	4	3	2	4	4	3	16	0.56	36	46	55	2-5	Spring	40	++	+++	+		
Annual Ryegrass	✓	✓	✓		Vegetative - 20:1	15-30	10-15	25-35	¼"	215,000	32	15-35	40°	6	7	Scavenger	5	5	3	5	3	2	3	5	9	0.58	38	65	58	.5-2	90	0	++	+	+++		
Spring Oats (Hay)	✓	✓			Vegetative - 20:1	30-50	20-40	80-120	¾" - 1"	15-18,000	38	20-60	38°	7	5-8	Scavenger	2	4	5	4	3	1	3	4	10	0.54	39	63	54	3-6	60-70	0	++	+	+++		
Spring Oats (Silage)	✓	✓			Straw - 80:1	30-50	20-40	80-120	¾" - 1"	15-18,000	0	20-60	38°	7	5-8	Scavenger	2	4	4	4	3	1	3	4	12	0.60	39	59	60	1.5-3.5	80	0	0	+	+++		
Winter Rye (Hay)	✓	✓			Vegetative - 20:1	30-50	20-40	80-120	¾" - 1"	16-18,000	50	20-60	34°	3	5-8	Scavenger	4	5	4	5	3	1	4	4	10	0.58	38	65	58	3-5	Spring	0	+	++	+++		
Winter Rye (Silage)	✓	✓			Straw - 70:1	30-50	20-40	80-120	¾" - 1"	16-18,000	0	20-60	34°	3	5-8	Scavenger	4	5	4	5	3	1	4	4	14	0.59	37	59	59	2.5-4	Spring	0	0	+	+++		
Triticale (Winter)	✓	✓			Vegetative - 20:1	30-50	20-40	80-120	¾" - 1"	14-16,000	48	20-60	38°	3	6-8	Scavenger	2	4	5	4	3	1	4	4	12	0.58	41	69	56	2.5-4	Spring	0	+	++	+++		
Triticale (Spring)	✓	✓			Straw - 80:1	30-50	20-40	80-120	¾" - 1"	14-16,000	0	NR	38°	3	6-8	Scavenger	2	4	5	4	3	1	4	4	12	0.58	39	56	58	3-4	50-60	0	++	+	+++		
Barley (Winter)	✓	✓	✓		Vegetative - 20:1	30-50	20-40	80-120	¾" - 1"	14-16,000	40	20-60	38°	6	6-8	Scavenger	1	4	5	4	3	2	3	4	9	0.57	37	65	57	3-4	Spring	0	++	+	+++		
Barley (Spring)	✓	✓			Straw - 80:1	30-50	20-40	80-120	¾" - 1"	14-16,000	0	NR	38°	6	6-8	Scavenger	1	4	5	4	3	2	3	4	12	0.58	37	58	59	2-4	50	0	++	+	+++		
Wheat (Hay)	✓	✓			Vegetative - 20:1	30-50	20-40	80-120	¾" - 1"	11-12,000	48	20-60	38°	3	6-10	Scavenger	3	4	4	5	3	1	4	4	9	0.57	38	66	59	2-3	Spring	0	++	+++	+		
Wheat (Silage)	✓	✓			Straw - 80:1	30-50	20-40	80-120	¾" - 1"	11-12,000	0	20-60	38°	3	6-10	Scavenger	3	4	4	5	3	1	4	4	12	0.59	37	62	59	2-3	Spring	0	0	+	+++		
Forage Sorghum	✓				Vegetative - 20:1	6-20	0	6-20	¾" - 1 ½"	17,000	45	NR	65°	Frost	10	Scavenger	4	5	5	4	4	3	3	4	9	0.59	38	59	59	6-9	80-105	0	++	+	+++		
Sorghum x Sudan	✓				Leftover Stalks - 80:1	25-70	5-20	25-70	¾" - 1 ½"	21,000	45	NR	65°	Frost	10	Scavenger	4	5	5	4	4	3	3	4	16	0.70	29	55	55	5-8	45-70	30	+	++	+++		
Sudangrass	✓				0	20-45	0	20-45	½" - 1"	43,000	40	NR	65°	Frost	3-5	Scavenger	4	5	5	4	4	3	3	4	9	0.57	43	67	57	2-6	50	30	+	++	+++		
Teff Grass	✓				Vegetative - 20:1	8-12	0	8-12	¼"	1,300,000	0	NR	65°	Frost	3-5	Scavenger	1	3	3	4	3	2	3	4	18	0.60	33	57	64	3-5	35	25	0	+	+++		
Pearl Millet	✓	✓			12:1 - 20:1	20-30	5-20	20-30	½" - 1"	60,000	42	NR	65°	Frost	3-5	Scavenger	3	5	5	4	4	3	3	5	16	0.66	39	48	52	3-6	45	35	++	+	+++		
German Millet	✓	✓			12:1 - 20:1	20-25	5-15	20-25	1"	220,000	0	NR	65°	Frost	3-5	Scavenger	3	3	4	5	3	1	3	4	14	N/A	34	60	60	2-4	50	0	+++	0	0		
White Proso Millet	✓	✓			12:1 - 20:1	20-30	5-20	20-30	1"	80,000	37	NR	65°	Frost	3-5	Scavenger	3	3	4	5	3	1	3	4	12	N/A	39	72	62	1.5-2.5	50	0	+++	0	0		
SF 101 Cover Starter		✓	✓		0	30-35	0	40-50	¼" - 1"	0	48	30-40	45°	0	Varies	Scavenger	5	5	5	4	3	2	4	4	10-13	Nutrition values vary due to differences in the forage quality of the mix components and differences in how and when each component is harvested (grazed versus baleage)				2-5	45-50	Spring	+++	+	++		
SF 102 Cover Starter+		✓	✓		0	30-35	0	40-50	¼" - 1"	0	54	30-40	45°	0	Varies	Both	5	5	4	5	3	2	4	4	12-15					2-5	45-50	Spring	+++	+	++		
SF 125 N-Hancer		✓	✓		0	35-40	0																														