

ANNUAL COVER CROP FORAGE		Planting Season				Carbon/Nitrogen Ratio (C:N)	Seeding Rate (mono) lbs/acre	Seeding Rate (mix) lbs/acre	Seeding Rate (for forage) lbs/acre	Seeding Depth (with drill)	Seeds/lb	Seeding Time	Bulk Density * lbs/ft <sup>3</sup>	Aerial Application Seeding Rate*	Germination Soil Temperature (Degrees Fahrenheit)
		Spring	Summer	Late Sum	Fall										
BRASSICA/MUSTARD	Daikon Radish					Tops - 9:1	3-8	1-3	5-8	1/4"	30-40,000	Aug-Sep	44	3-8	45°F
	Oilseed Radish					Tops - 9:1	8-12	3-8	8-12	1/4"	30-40,000	Aug-Sep	44	6-12	45°F
	Turnips (Top)					Tops - 9:1	2-6	2-4	3-8	1/4"	220,000	Aug-Sep	45	2-6	45°F
	Vivant Brassica					10:1 - 15:1	4-6	2-3	5-6	1/4"	165,000	July-Sep	44	5-6	45°F
	Forage Collards					15:1 - 25:1	5-12	1-4	10-12	1/4"-1/2"	175,000	Mar-Apr; Aug-Oct	44	8-12	40°F
	Rapeseed					20:1 - 22:1	4-6	2-4	6-8	1/4"-1/2"	145,000	Apr-May; Aug-Sep	45	5-8	41°F
Yellow/White Mustard					20:1 - 30:1	6-15	2-5	-	1/4"-3/4"	100,000	Apr-May; Aug-Sep	46	10-15	40°F	
LEGUMES	Crimson Clover					15:1 - 20:1	10-15	4-8	6-15	1/4"	150,000	Feb-Mar; Aug-Sep	52	6-15	42°F
	Berseem Clover					15:1 - 20:1	8-20	5-10	15-20	1/4"	150,000	Mar-Apr; Aug-Sep	52	6-15	40°F
	Balansa Clover					15:1 - 20:1	3-6	1-4	3-6	1/4"	500,000	Feb-Mar; Aug-Sep	56	3-6	40°F
	Winter Hairy Vetch					10:1 - 15:1	15-30	10-20	30-40	1"	16,000	Aug-Sep	52	NR	60°F
	Sunn Hemp					18:1 - 29:1	15	5-8	5-15	1/2"-1"	15,000	July-Sep	-	NR	65°F
	Austrian Winter Peas					15:1 - 20:1	30-80	10-30	40-60	1"	2,000	Aug-Sep	52	NR	41°F
	Peas (Hay)					20:1 - 25:1	75-120	10-50	75-120	1"	3,000	Mar-Apr; Aug-Sep	50	NR	41°F
	Peas (Silage)					Pea Straw - 29:1	75-120	10-50	75-120	1"	3,000	Mar-Apr; Aug-Sep	-	NR	41°F
	Peas and Oat Mix					-	75-120	-	75-120	3/4"-1"	Varies	Mar-Apr; Aug-Sep	-	NR	41°F
	Medium Red Clover					12:1 - 16:1	8-12	6-8	8-12	1/4"	270,000	Feb-May; Aug-Oct	48	4-10	41°F
GRASSES	Annual Ryegrass					Vegetative - 20:1	15-30	10-15	25-35	1/4"	215,000	Mar-Apr; Aug-Oct	32	15-35	40°F
	Spring Oats (Hay)					Vegetative - 20:1	30-50	20-40	80-120	3/4"-1"	15-18,000	Mar-Apr; Aug-Sep	38	20-60	38°F
	Spring Oats (Silage)					Straw - 80:1	30-50	20-40	80-120	3/4"-1"	15-18,000	Mar-Apr; Aug-Sep	-	20-60	38°F
	Fall Rye (Hay)					Vegetative - 20:1	30-50	20-40	80-120	3/4"-1"	16-18,000	Aug-Oct	50	20-60	34°F
	Fall Rye (Silage)					Straw - 70:1	30-50	20-40	80-120	3/4"-1"	16-18,000	Aug-Oct	-	20-60	34°F
	Triticale (Fall)					Vegetative - 20:1	30-50	20-40	80-120	3/4"-1"	14-16,000	Aug-Oct	48	20-60	38°F
	Triticale (Spring)					Straw - 80:1	30-50	20-40	80-120	3/4"-1"	14-16,000	Mar-Apr; Aug-Sep	-	NR	38°F
	Barley (Fall)					Vegetative - 20:1	30-50	20-40	80-120	3/4"-1"	14-16,000	Aug-Oct	40	20-60	38°F
	Barley (Spring)					Straw - 80:1	30-50	20-40	80-120	3/4"-1"	14-16,000	Mar-Apr; Aug-Sep	-	NR	38°F
	Wheat (Hay)					Vegetative - 20:1	30-50	20-40	80-120	3/4"-1"	11-12,000	Aug-Oct	48	20-60	38°F
	Wheat (Silage)					Straw - 80:1	30-50	20-40	80-120	3/4"-1"	11-12,000	Aug-Oct	-	20-60	38°F
	Forage Sorghum					Vegetative-20:1	6-20	-	6-20	3/4"-1 1/2"	17,000	May-July	45	NR	65°F
	Sorghum x Sudan					Leftover Stalks-80:1	25-70	5-20	25-70	3/4"-1 1/2"	21,000	May-July	45	NR	65°F
	Sudangrass					-	20-45	-	20-45	1/2"-1"	43,000	May-July	40	NR	65°F
	Teff Grass					Vegetative - 20:1	8-12	-	8-12	1/4"	1,300,000	May-July	-	NR	65°F
	Pearl Millet					12:1 - 20:1	20-30	5-20	20-30	1/2"-1"	60,000	May-Aug	42	NR	65°F
German Millet					12:1 - 20:1	20-25	5-15	20-25	1"	220,000	May-Aug	-	NR	65°F	
White Proso Millet					12:1 - 20:1	20-30	5-20	20-30	1"	80,000	May-Aug	37	NR	65°F	
SOIL FIRST® MIXES	SF 101 Cover Starter					-	30-35	-	40-50	1/4"-1"	-	Aug-Sep	48	30-40	45°F
	SF 102 Cover Starter					-	30-35	-	40-50	1/4"-1"	-	Aug-Sep	54	30-40	45°F
	SF 120 Extender					-	35-40	-	40-50	1/4"-1"	-	Aug-Sep	52	35-50	45°F
	SF 125 N-Hancer					-	35-40	-	40-50	1/4"-1"	-	July-Sep	44	NR	45°F
	SF 140 Multi-Purpose					-	35-40	-	40-50	1/4"-1"	-	July-Sep	50	NR	45°F
	SF 142 Classic					-	12-15	-	15-20	1/4"-1/2"	-	Aug-Sep	52	20-25	45°F
	SF 150 Field Fit					-	30-35	-	40-50	1/4"-1"	-	Aug-Sep	36	30-40	45°F
	SF 160 Rooting					-	15-20	-	20-25	1/4"-1/2"	-	Aug-Sep	50	20-25	45°F
	SF 165 Late Grazer					-	20-25	-	20-25	1/4"-1"	-	July-Sep	52	NR	60-65°F
	SF 167 Summer Grazer					-	25-30	-	25-30	1/4"-1"	-	July-Sep	50	NR	60-65°F
SF 175 AccuSpread					-	20-25	-	25-30	1/4"-1/2"	-	Aug-Sep	35	25-30	45°F	
SF 180 Shifter					-	20-25	-	25-30	1/4"-1/2"	-	Aug-Sep	33	25-30	45°F	
OTHER	Phacelia					12:1 - 18:1	8	1-2	8	1/4"	230,000	Jun-Sep	-	8-10	37°F
	Sunflower					Leaves 20:1, Stalks 40:1	3-5	1-2	3-5	3/4"-1"	8,000	May-Aug	28	NR	50°F
	Buckwheat					10:1 - 18:1	40-55	5-20	40-55	1/2"-1"	15,000	May-Aug	40	NR	65°F
	Sugar Beet					Tops - 19:1	2-5	1-3	2-5	1/4"	-	May-July	24	NR	

\* +/- 5%. Bulk Density averages are only a guide. Moisture, humidity and seed quality all affect bulk density.

REFERENCES: Texas Tech University, Oklahoma State University, Iowa State University, Mississippi State University, North Dakota State University, Colorado State University, University of Florida, Michigan State University, University of Wisconsin, Kansas State University