

COVER CROPS

AFTER CORN GRAIN
GOING TO SOYBEANS

START

QUICK REFERENCE GUIDE TO SOIL FIRST® COVER CROP MIXES

Every Soil First® brand cover crop mix contains Tillage Radish®.



COVER CROPS

AFTER SOYBEANS GOING TO CORN GRAIN

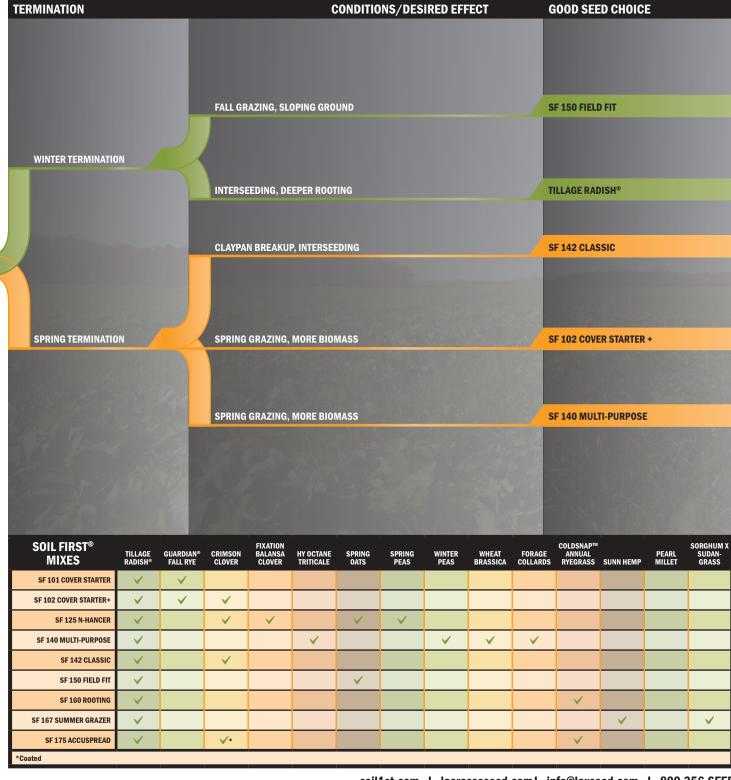
START

OPTIONAL:

Adding Winter Peas, Hairy Vetch or Crimson Clover to an existing mix can help boost nitrogen fixation on fields where corn will be planted next.

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COVER CROPS AFTER CORN SILAGE

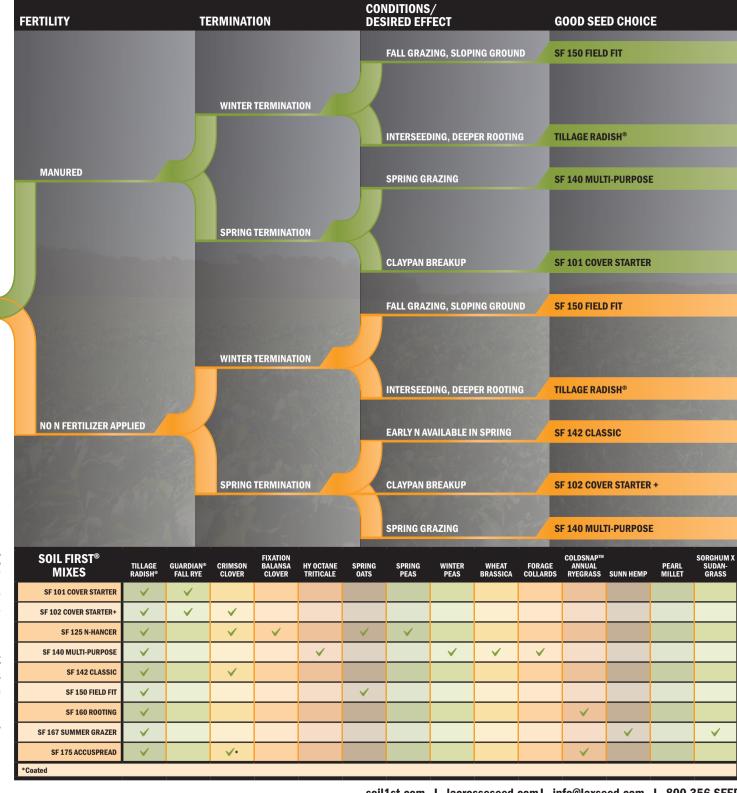
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COVER CROPS

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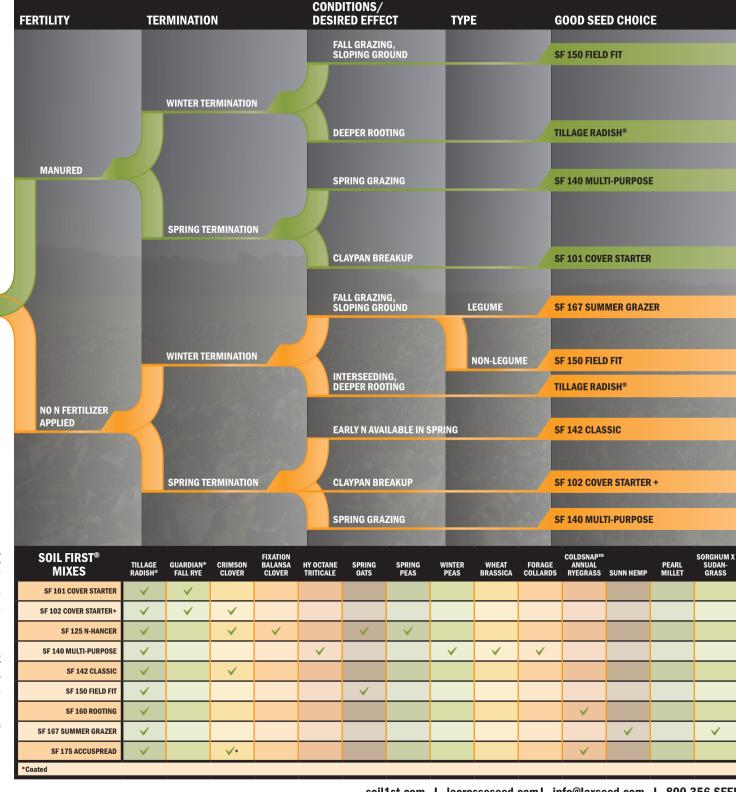
AFTER WHEAT GOING TO CORN

OPTIONAL:

Adding Winter Peas, Hairy Vetch or Crimson Clover to an existing mix can help boost nitrogen fixation on fields where corn will be planted next.

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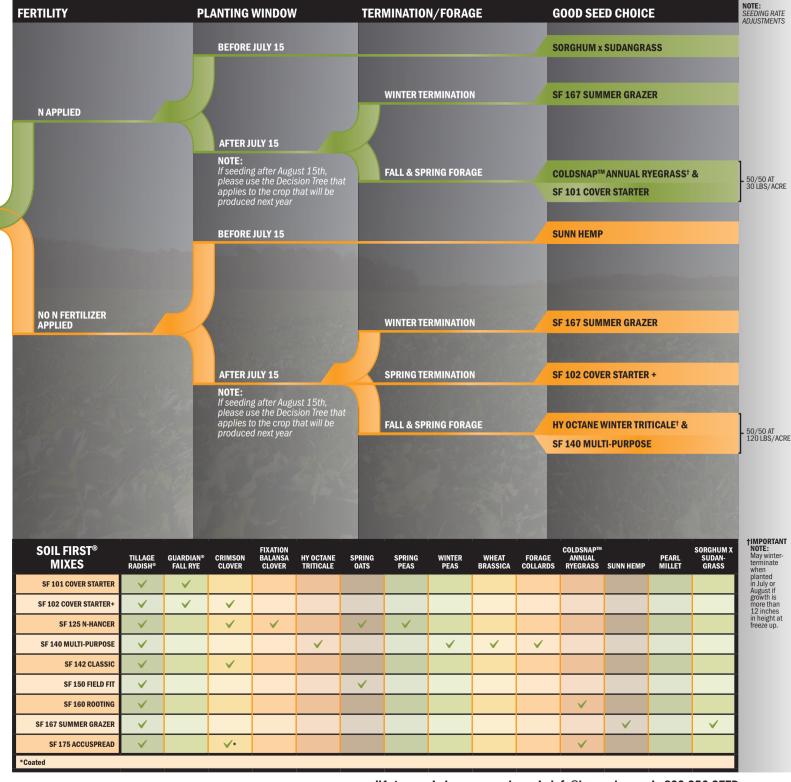
FOR PREVENTED PLANTING

OPTIONAL:

Adding Winter Peas, Hairy Vetch or Crimson Clover to an existing mix can help boost nitrogen fixation on fields where corn will be planted next.

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COVER CROPS

FOR REMEDIATION

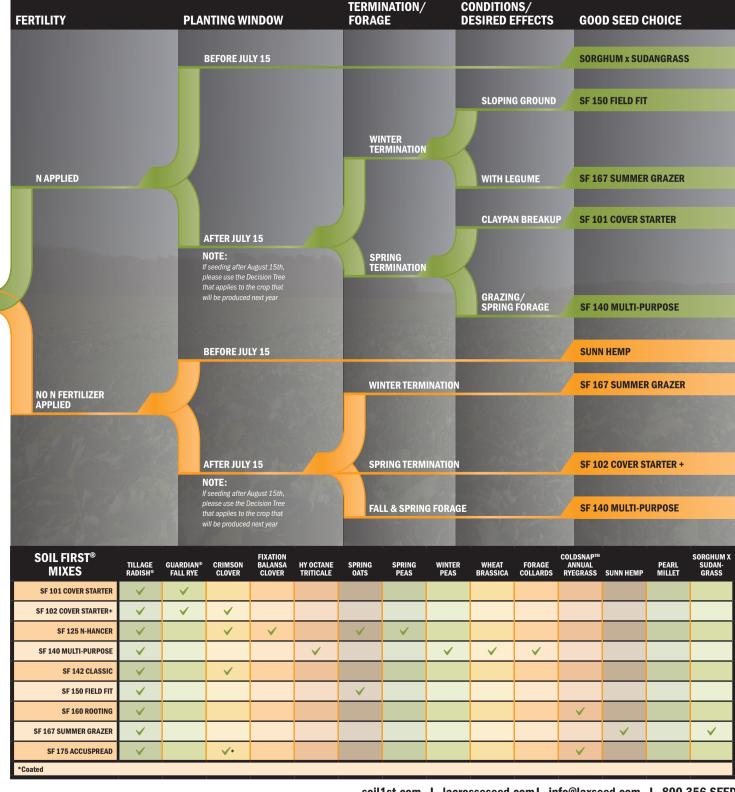
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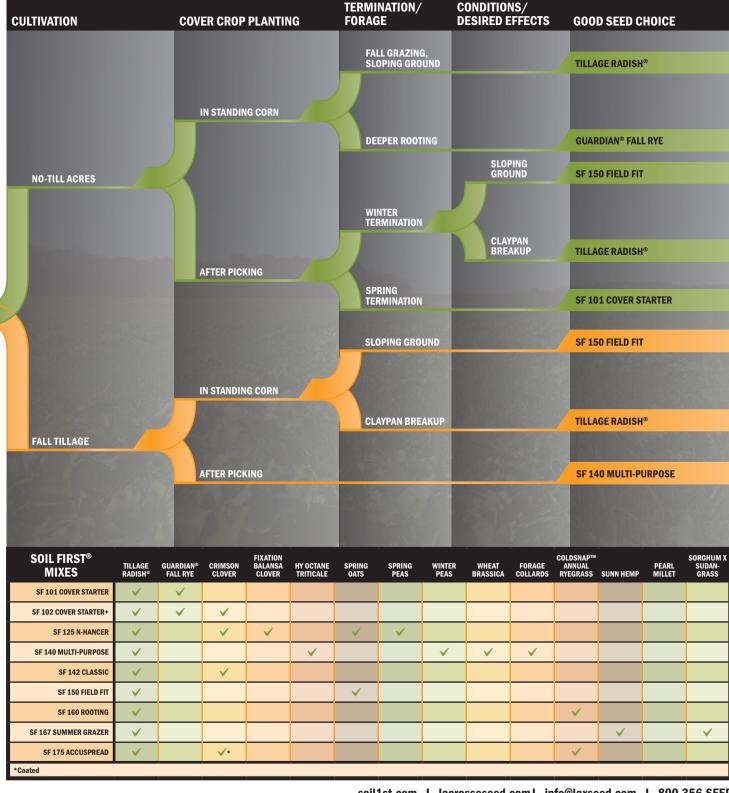


COVER CROPS FOLLOWING SEED CORN

START

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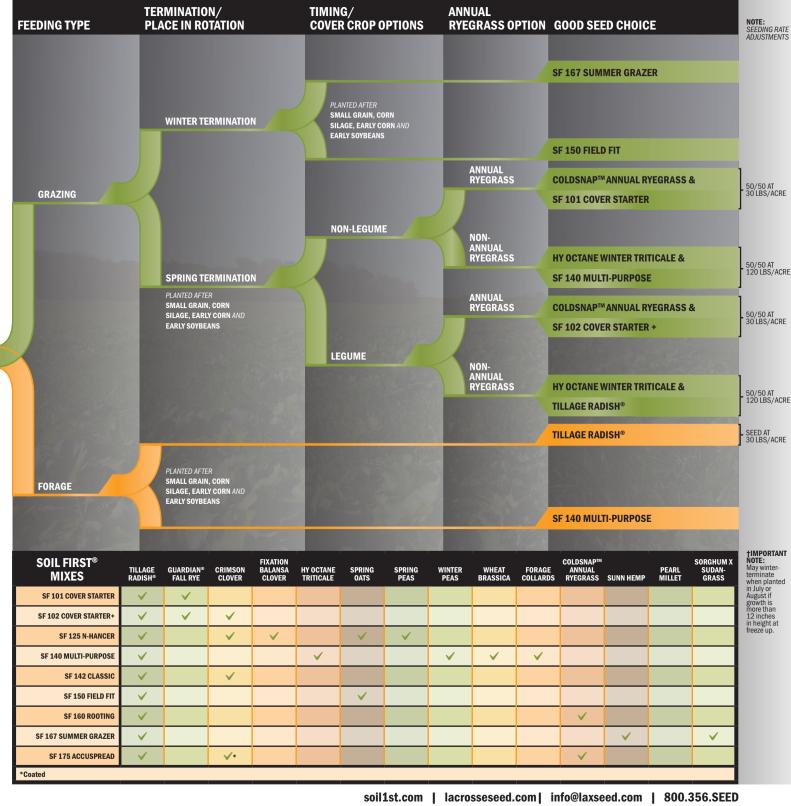


COVER CROPS FOR FALL GRAZING OR FORAGE HARVEST

START

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START

NOTE: SEEDING RATE ADJUSTMENTS ANNUAL **GOOD SEED CHOICE FEEDING TYPE PLACE IN ROTATION COVER CROP OPTIONS** RYEGRASS OPTION COLDSNAPTM ANNUAL RYFGRASS & ANNUAL RYEGRASS SF 101 COVER STARTER + 50/50 AT 30 LBS/ACRE NON-LEGUME NON-ANNUAL RYEGRASS **HY OCTANE WINTER TRITICALE &** 50/50 AT 120 LBS/ACRE GRAZING SF 140 MULTI-PURPOSE ANNUAL SMALL GRAIN, CORN SILAGE, EARLY CORN AND RYEGRASS COLDSNAP™ ANNUAL RYEGRASS & 50/50 AT 30 LBS/ACRE EARLY SOYBEANS SF 102 COVER STARTER + LEGUME NON-ANNUAL RYEGRASS **HY OCTANE WINTER TRITICALE &** 50/50 AT 120 LBS/ACRE SF 140 MULTI-PURPOSE ANNUAL RYEGRASS COLDSNAP™ ANNUAL RYEGRASS & 50/50 AT 30 LBS/ACRE SF 101 COVER STARTER NON-LEGUME NON-ANNUAL RYEGRASS **HY OCTANE WINTER TRITICALE &** 50/50 AT 120 LBS/ACRE **SF 140 MULTI-PURPOSE** ANNUAL RYEGRASS COLDSNAP™ ANNUAL RYEGRASS & 50/50 AT 30 LBS/ACRE PLANTED AFTER SF 102 COVER STARTER + SMALL GRAIN, CORN FORAGE SILAGE, EARLY CORN AND **LEGUME** NON-ANNUAL RYEGRASS **HY OCTANE WINTER TRITICALE &** 50/50 AT 120 LBS/ACRE **SF 140 MULTI-PURPOSE** SEED AT 120 LBS/ACRE

QUICK REFERENCE GUIDE TO SOIL FIRST® COVER CROP MIXES

COVER CROPS

FOR **SPRING GRAZING**

OR FORAGE HARVEST

Adding Winter Peas.

Clover to an existing

mix can help boost

nitrogen fixation on

fields where corn will be planted next.

Hairy Vetch or Crimson

OPTIONAL:

Every Soil First® brand cover crop mix contains Tillage Radish®.

Marie San		HY OCTANE WINTER TRITICALE &												
SOIL FIRST® MIXES	TILLAGE RADISH®	GUARDIAN® FALL RYE	CRIMSON CLOVER	FIXATION BALANSA CLOVER	HY OCTANE TRITICALE	SPRING OATS	SPRING PEAS	WINTER PEAS	WHEAT Brassica	FORAGE COLLARDS	COLDSNAP™ ANNUAL RYEGRASS	SUNN HEMP	PEARL MILLET	SORGHUM X SUDAN- GRASS
SF 101 COVER STARTER	>	~												
SF 102 COVER STARTER+	>	~	~											
SF 125 N-HANCER	~		V	V		✓	~							
SF 140 MULTI-PURPOSE	V				~			V	~	V				
SF 142 CLASSIC	~		~											
SF 150 FIELD FIT	~					V								
SF 160 ROOTING	~										~			
SF 167 SUMMER GRAZER	V											~		V
SF 175 ACCUSPREAD	~		V *								~			
*Coated														

COVER CROPS

START

FOR EARLY VEGETABLES

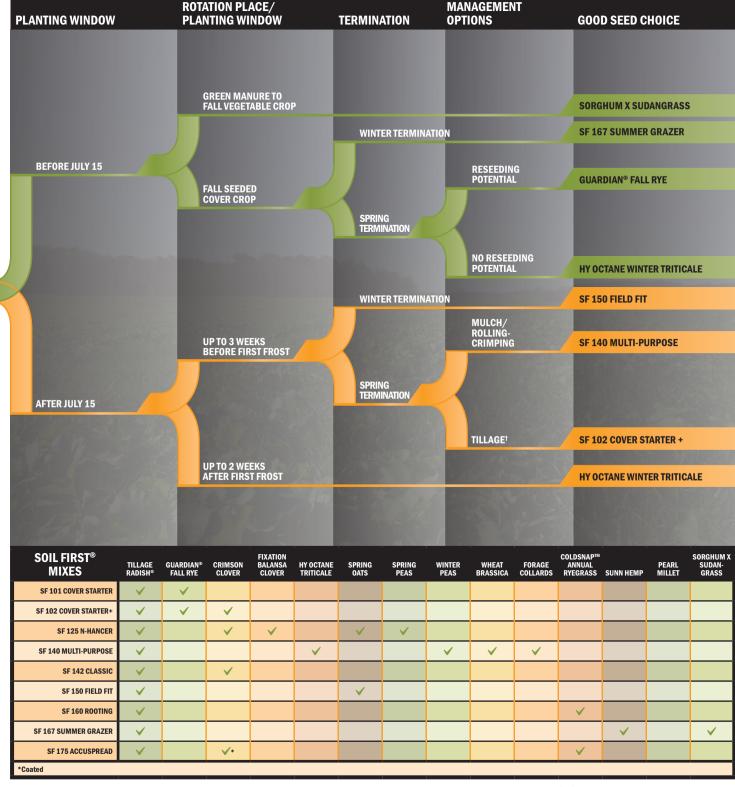
OPTIONAL:

Adding Winter Peas, Hairy Vetch or Crimson Clover to an existing mix can help boost nitrogen fixation on fields where corn will be planted next.

QUICK REFERENCE GUIDE TO SOIL FIRST® COVER CROP MIXES

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Each Soil First® mix contains select varieties or species of cover crops that work together to provide a range of benefits when used as part of a well planned crop rotation. Results based on conditions.



May winterterminate when planted in July or August if growth is more than 12 inches in height at freeze up.

†IMPORTANT

NOTE:

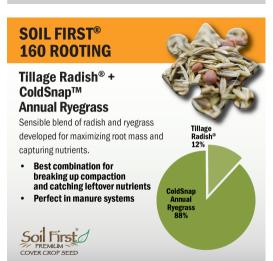












SOIL FIRST® 120 FXTENDER Hy Octane Triticale + **Fixation Balansa Clover** Tillage Radish® Extended soil coverage mixing traditional biomass options with the Fixation Radish® 7% Ralanca improved winter-hardiness and rooting Clover 7% notential of balansa clover Mix components equal up to 120 days of grazing Extended ground cover (7 - 8 mths.) Soil First COVER CROP SEED





SOIL FIRST® 167 SUMMER GRAZER

Tillage Radish® + Sorghum x Sudangrass + Sunn Hemp

Summer seeded mix where the focus is quick tonnage and over – biomass production.

- · Tolerates poor soil environments
- · Formulations for fall grazing
- Sorghum x sudangrass offers increased tonnage in warm and dry climates



fers Sunn Hemp 45%

Tillage Sorghum Sudangrass 40%

Soil First



Guardian® Fall Rye is carefully screened to provide dependable results in cover cropping situations. Excellent germination and early vigor in cooler temperatures, combined with solid winter hardiness and quick spring green-up, make Guardian® an excellent choice for a low-risk entry into cover cropping.

- Screened for purity and cleanliness
- · Clear tag certified noxious weed free
- · Sclerotinia (white mold) free
- · Professionally grown for seed, not grain
- · Strong winter hardiness
- Excellent germination and early vigor



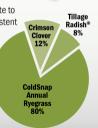
SOIL FIRST® 175 ACCUSPREAD

Coated Crimson Clover + Tillage Radish® + Coated ColdSnap™ Annual Ryegrass

Coated clover and coated ryegrass equate to more uniform spread patterns and consistent germination in broadcast applications.

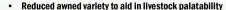
- Facilitates more accurate broadcast seeding patterns
- Best combination for compaction alleviation & nutrient scavenging





Hy Octane Winter Triticale

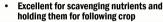
Hy Octane is a new winter triticale variety that has shown favorable forage yield and winter hardiness across the Midwest. Hy Octane makes a great option for fall and winter grazing, extending the season far past brassicas or cool-season perennial grasses.

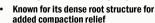


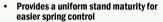
- · Excellent standability
- Good early season vigor and earlier heading date than traditional varieties
- Allows greater flexibility for potential double cropping
- Medium straw length allows for easier hay wilting and silage packaging



ColdSnap™ Annual Ryegrass









Superior winter hardiness when compared to other annual ryegrasses





Tillage Radish® was selected based on performance in the field. This daikon type radish was evaluated across many different soil types and environments from the Northwest to across the upper Midwest and Transition Zone. A superior, deep, penetrating taproot is one characteristic that separates Tillage Radish® from other radish varieties - growing to a level of 3 - 6', based on soil type, region and planting date. The upper portion of the taproot (or tuber) can grow to a length of 12 - 24". Tillage Radish® germinates in just 2 to 3 days when moisture is present.

 Reduces compaction and improves drainage and air/water movement (through rapid spring decay)



- Soaks up and releases nitrogen and other nutrients in spring when cash crops need it most
- · Winterkills with temp in the teens

			PLANTING RATE						
KIND OF SEED	APPROX. SEEDS/LB	LBS/BU	PLANTING RATE LBS/ACRE	LBS/ACRE IN MIXES	SEEDING DEPTH	SUGGESTED PLANTING DATES	EMERGENCE TIME (DAYS)	PRIMARY USE	LIFE
BRASSICAS, HYBRID			4 - 6		½"		4 - 6		
, and the second	165,000	N/A		2 - 3		JUL - SEP		COVER CROP	ANNUAL
WINTER RYE GRAIN	18,000	56	30 - 50	20 - 40	34" - 1"	MAR - APR, AUG - SEP	5-8	COVER CROP	ANNUAL
CLOVER, BALANSA	500,000	60	3 - 6	1 - 4	1/4"	FEB - MAR, AUG - SEP	14	COVER CROP	PERENNIAL
CLOVER, CRIMSON	150,000	60	10 - 15	4 - 8	1/4"	AUG - OCT	7 - 10	COVER CROP	ANNUAL
MILLET, PEARL	60,000	52	10 - 30	5 - 20	½" - 1"	MAY - JUL	3 - 5	PASTURE, SILAGE	ANNUAL
OATS, SPRING, FALL	16,000	32	30 - 50	20 - 40	3⁄4" - 1"	MAR - APR, AUG SEP	5 - 8	COVER CROP	ANNUAL
PEAS, AUSTRIAN WINTER	2,000	60	30 - 80	10 - 30	1"	AUG - SEP	9	COVER CROP	ANNUAL
RADISH	35,000	N/A	3 - 8	1 - 3	1/4" - 1/3"	AUG -SEP	14	COVER CROP	ANNUAL
RYEGRASS, ANNUAL	227,000	24	15 - 30	10 - 15	1/4"	MAR - APR, AUG - OCT	7	COVER CROP	ANNUAL
REYGRASS, PERENNIAL	227,000	24	30 - 40	6 - 10	1/4" - 1/2"	FEB - MAY, AUG - SEP	14	HAY, PASTURE	PERENNIAL
SORGHUM x SUDANGRASS	21,000	56	25 - 50	5 - 20	3/4" - 11/2"	MAY - JUL	10	HAY, PASTURE	ANNUAL
SORGHUM x SUDANGRASS BMR	21,000	56	15 - 35	N/A	1"	MAY - JUL	10	HAY, PASTURE	ANNUAL
SUNN HEMP	15,000	N/A	15	5 - 8	½" - 1"	JUL - SEP	3 - 7	COVER CROP	ANNUAL
TRITICALE	15,000	48	30 - 50	20 - 40	3⁄4" - 1"	MAR - APR, AUG - SEP	6 - 8	HAY, PASTURE	ANNUAL
				PLANTING RTAE	SEEDING				
SOIL FIRST®			PLANTING RATE	LBS/ACRE FOR	DEPTH	SUGGESTED	EMERGENCE	NITROGEN FIXES	GERM SOIL
COVER CROP MIX			LBS/ACRE	FORAGE	(DRILL)	PLANTING DATES	TIME (DAYS)	OR SCAVENGES	TEMP (F)
SOIL FIRST® 101 COVER STARTER			30 - 35	40 - 50	1/4" - 1"		VARIES	SCAVENGER	45°
SOIL FIRST® 102 COVER STARTER +			30 - 35	40 - 50	1/4" - 1"		VARIES	BOTH	45°
SOIL FIRST® 125 N-HANCER	125 N-HANCER		35 - 40	40 - 50	½" - 1"		VARIES	FIXER	45°
SOIL FIRST® 140 MULTI-PURPOSE			35 - 40	40 - 50	1/4" - 1"	OFF COLL FIDOT®	VARIES	BOTH	45°
SOIL FIRST® 142 CLASSIC			12 - 15	15 - 20	1/4" - 1/2"	SEE SOIL FIRST® MANAGEMENT GUIDE	VARIES	BOTH	45°
SOIL FIRST® 150 FIELD FIT			30 - 35	40 - 50	½" - 1"	IVIAIVAGEIVIENT GUIDE	VARIES	SCAVENGER	45°
SOIL FIRST® 160 ROOTING			15 - 20	20 - 25	1/4" - 1/3"		VARIES	SCAVENGER	45°
SOIL FIRST® 167 SUMMER GRAZER	167 SUMMER GRAZER		25 - 30	25 - 30	1/4" - 1"		VARIES	ВОТН	60 - 65°
SOIL FIRST® 175 ACCUSPREAD			25 - 30	25 - 30	1/4" - 1/2"		VARIES	ВОТН	45°





