

Technical Report No. 66

STATE OF THE ART FOR CHLORIDE MANAGEMENT

Appendix Y

CHARACTERISTICS AND FEATURES OF COMMON COVER CROPS

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Appendix Table 5.CoverCropCharacteristics
Characteristics and Features of Common Cover Crops

Cover Crop	Full seeding rate (lbs./acre)	Seeding depth (inches)	Reduce erosion	Increases soil organic matter	Scavenge nutrients	Promote biological nitrogen fixation	Suppress weeds	Provide supplemental hay	Provide supplemental grazing	Rooting depth/ Plant water use	Minimize/Reduce surface soil compaction	Minimize/Reduce subsoil compaction	Seed size (Large or Fine)	Crop type	Winter survival	Salinity tolerance	C:N Ratio	Mycorrhizal fungi association	Seeds/lbs.	Shade tolerance
Alfalfa	6.5	.25-.75	G	G	G	Y	G	G	F	DH	G	G	F	CB	Y	P	L	M	210,000	F
Barley	50	.75-2.0	G	G	G	N	G	G	G	MM	G	F	L	CG	N	G	M	M	14,000	F
Brassica hybrids	7	.25-.5	F	F	G	N	G	F	G	MM	G	F	L	CG	N	G	M	M	180,000	P
Buckwheat	50	.5-1.5	P	P	F	N	F	P	P	SL	F	P	L	WB	N	P	L	N	19,000	G
Cabbage, African	5	.25-.75	F	F	G	N	F	F	F	MM	G	G	F	CB	N	G	L	N	180,000	F
Camelina, Winter	3	.25-.5	F	F	F	N	P	P	P	ML	P	F	F	CB	S	P	L	N	400,000	P
Canola	5	.25-.75	F	F	G	N	G	F	F	MM	G	G	F	CB	S	G	L	N	140,000	F
Clover, Balansa	5	.25-.75	F	P	F	Y	P	P	F	SL	P	P	F	CB	N	P	L	M	500,000	F
Clover, Crimson	15	.25-.75	F	F	F	Y	P	F	F	SM	P	P	F	CB	S	P	L	M	150,000	F
Clover, Red	5	.25-.75	G	F	F	Y	F	F	F	SL	F	F	F	CB	Y	P	L	M	275,000	G
Clover, Sweet	4	.25-1.0	G	G	F	Y	G	F	F	MM	G	G	F	CB	Y	F	L	M	260,000	G
Collards or Kale	5	.25-.5	F	F	G	N	G	F	G	MM	G	G	F	CB	N	G	L	N	175,000	F
Corn	12	1-1.5	G	G	G	N	G	F	G	DH	G	G	L	WG	N	P	H	H	2,500	F
Cowpeas or Dry Beans	30	1-1.5	P	F	F	Y	P	P	F	SL	F	F	L	WB	N	P	L	M	4,000	F
Fava beans	75	1-1.5	F	F	F	Y	F	G	G	DM	F	F	L	CB	N	F	L	P	2,500	P
Flax	30	.25-.75	F	F	F	N	P	P	P	SM	F	P	F	CB	N	P	H	H	80,000	P
Lentils	30	1-1.5	P	P	P	Y	P	P	P	SL	P	P	F	CB	N	P	L	M	20,000	P
Millet, hay	15	.5-1.0	G	G	G	N	G	G	G	SL	G	F	F	WG	N	P	M	H	180,000	P
Millet, proso	25	.5-1.0	G	G	G	N	G	G	G	SL	G	F	F	WG	N	P	M	H	80,000	P
Mustard	6	.25-.75	F	F	F	N	G	F	P	MH	G	F	F	CB	N	P	L	N	140,000	P
Oats	70	.5-1.5	G	G	G	N	G	G	G	MM	G	F	L	CG	N	F	M	H	16,000	F
Peas	70	1.5-3.0	F	P	P	Y	F	F	F	SL	F	F	L	CB	N	P	L	M	3,500	F
Phacelia	4	.25-.5	F	F	F	N	P	P	P	DH	F	P	F	CB	N	P	L	M	225,000	F
Radishes	8	.25-.75	F	F	G	N	G	P	G	DH	G	G	F	CB	N	P	L	N	25,000	P
Rapeseed	5	.25-.75	F	F	G	N	G	F	G	MM	G	G	F	CB	Y	G	L	N	140,000	F

Table continued on next page.

AppendixTable 5.CoverCropCharacteristics (Continued)

Cover Crop	Full seeding rate (lbs./acre)	Seeding depth (inches)	Reduce erosion	Increases soil organic matter	Scavenge nutrients	Promote biological nitrogen fixation	Suppress weeds	Provide supplemental hay	Provide supplemental grazing	Rooting depth/ Plant water use	Minimize/Reduce surface soil compaction	Minimize/Reduce subsoil compaction	Seed size (Large or Fine)	Crop type	Winter survival	Salinity tolerance	C:N Ratio	Mycorrhizal fungi association	Seeds/lbs.	Shade tolerance
Rye, Cereal planted after 10/1	60	.75-2.0	G	G	G	N	G	G	G	MH	G	G	L	CG	Y	G	H	M	18,000	G
Rye, Cereal planted before 10/1	40	.75-2.1	G	G	G	N	G	G	G	MH	G	G	L	CG	Y	G	H	M	18,000	G
Ryegrass, Annual	15	.5-1.5	G	G	G	N	F	G	G	MM	G	F	F	CG	S	F	M	M	190,000	G
Safflowers	30	.5-1.0	F	F	G	N	F	P	P	DM	F	G	L	WB	N	F	M	M	15,000	P
Sorghum, Forage	15	.5-1.5	G	G	G	N	G	G	G	MM	G	G	L	WG	N	F	M	H	17,000	P
Sorghum, Grain	5	.5-1.5	G	G	G	N	G	G	G	MM	G	G	L	WG	N	F	M	H	17,000	P
Soybeans	35	1-1.5	F	P	F	Y	F	F	F	SM	F	F	L	WB	N	P	L	M	3,000	F
Sudangrass	20	.5-1.5	G	G	G	N	G	G	G	MM	G	G	L	WG	N	F	M	H	25,000	P
Sugar beets	4	.25-.5	F	P	G	N	F	P	G	DH	G	G	F	CB	N	G	L	N	22,000	P
Sunflowers	7	.5-1.0	F	F	G	N	F	P	G	DM	F	G	L	WB	N	F	M	M	8,000	P
Sunn hemp	15	1.5-2.0	F	F	F	Y	F	P	F	DM	F	F	L	WB	N	P	L	M	15,000	P
Teff grass	5	.13-.25	G	G	F	N	F	G	G	SM	G	F	F	WG	N	P	M	H	1,000,000	N
Triticale	60	.5-1.5	G	G	G	N	G	G	G	MH	G	F	L	CG	Y	G	M	M	15,000	F
Turnips	4	.25-.5	F	P	G	N	G	P	G	DH	G	G	F	CB	S	P	L	N	175,000	P
Vetch, Chickling	50	.5-1.5	F	F	F	Y	F	F	P	SL	F	F	L	CB	N	P	L	M	2,500	F
Vetch, Common	25	.5-1.5	F	F	F	Y	F	F	G	SM	F	F	L	CB	N	P	L	M	8,000	F
Vetch, Hairy	15	.5-1.5	G	F	F	Y	F	F	F	SM	G	F	L	CB	Y	P	L	M	14,000	G
Wheat, Spring	60	.5-1.5	G	G	G	N	G	G	G	MH	G	F	L	CG	N	G	M	M	15,000	F
Wheat, Winter	60	.75-2.0	G	G	G	N	G	G	G	MH	G	F	L	CG	Y	G	M	M	15,000	F

Ratings:

L = Low
M = Medium
H = High
G = Good
F = Fair
P = Poor
Y = Yes
N = No

Rooting Depth/Wate Use:

SL = Shallow rooted/Low water use
SM = Shallow rooted/Medium water use
SH = Shallow rooted/High water use
ML = Medium rooted/Low water use
MM = Medium rooted/Medium water use
MH = Medium rooted/High water use
DL = Deep rooted/Low water use
DM = Deep rooted/Medium water use
DH = Deep rooted/High water use
Shallow = 6 – 18 inches
Medium = 18 – 24 inches
Deep = 24+ inches

Crop types:

CG = cool season grass
CB = cool season broadleaf
WB = warm season broadleaf
WG = warm season grass

Source: NRCS