

Table 1: Cover Crop - Common Species and Properties

Cover Crop	Erosion Reduction	Increase soil organic matter	Capture, recycle, redistribute nutrients in the soil profile	Promote biological nitrogen fixation	Weed suppression	Provide supplemental hay	Provide supplemental grazing	Rooting Depth / Plant Water Use /1	Minimize / reduce soil compaction	Seed size (Large or Fine)	Crop Type and Seeding Dates /2 /3	Full Seeding rate, lbs/acre /4	Seeding depth, inches	Salinity tolerance	C:N Ratio	Attract Beneficial Insects	Mycorrhizal fungi association
Alfalfa	G	G	G	Y	G	F	F	DH	G	F	CB	6.5	.25 - .75	P	L	Y	M
Alsike clover	G	F	G	Y	G	F	F	SL	P	F	CB	3	.25 - .75	P	L	Y	M
Annual Oregon ryegrass	F	G	G	N	F	G	G	MM	P	F	CG	15	.5-1.5	F	M	Y	L
Barley	G	G	F	N	G	F	F	MM	F	L	CG	50	.75 - 2	G	M	Y	M
Brassica hybrids	F	F	G	N	G	F	F	MM	G	F	CB	7	.25 - .5	G	L	Y	N
Buckwheat /5	G	F	G	N	G	P	P	SL	P	F	WB	50	.5 - 1.5	P	L	Y	N
Canola	F	F	G	N	P-G**	F	F	MM	G	F	CB	5	.25 - .75	G	L	Y	N
Chickling vetch	G	F	G	Y	F	F	F	SL	F	L	CB	50	.5 - 1.5	P	L	Y	M
Common vetch	G	F	F	Y	P	F	F	SM	F	L	CB	25	.5 - 1.5	P	L	Y	M
Corn	G	G	G	N	P-G**	F	F	DH	G	L	WG	12	1-1.5	P	H	N	H
Cowpeas	P	P	F	Y	G	F	F	SL	F	L	WB	30	1 - 1.5	P	L	Y	M
Crimson clover	G	F	G	Y	G	G	G	SM	F	F	CB	15	.25-.75	P	L	Y	M
Dry beans	P	P	F	Y	G	F	F	SL	F	L	WB	30	1 - 1.5	P	L	Y	M
Ethiopian cabbage	F	F	G	N	F	F	F	MM	G	F	CB	5	.25 - .75	G	L	Y	N
Flax	F	F	F	N	P	P	P	SM	P	F	CB	30	.25-.75	F	H	Y	H
Forage sorghum (includes sudan hybrids)	G	G	G	N	G	G	F	MM	G	L	WG	15	.5 - 1.5	F	M	Y	H
Grain sorghum	G	G	G	N	G	G	F	MM	G	L	WG	5	.5 - 1.5	F	M	Y	H
Hairy vetch	G	F	F	Y	P	F	F	SM	F	L	CB	15	.5 - 1.5	P	L	Y	M
Kale	F	F	G	N	G	F	F	MM	G	F	CB	4	.25 - .5	G	L	Y	N
Lacy Phacelia	G	G	G	N	G	P	P	DH	G	F	CB	4	.25 - .5	P	L	Y	M
Lentils	P	P	F	Y	P	F	F	SL	P	F	CB	30	1-1.5	P	L	Y	M
Millet	G	G	F	N	G	G	F	SL	F	F	WG	25	.25-.75	P	M	N	H
Mustard, oriental or brown	F	F	F	N	G	F	F	MH	F	F	CB	6	.25 - .75	P	M	Y	N
Mustard, tame yellow	F	F	F	N	G	F	F	MH	F	F	CB	12	.25 - .75	P	L	Y	N
Oats	G	G	F	N	F	G	F	MM	F	L	CG	70	.5 - 1.5	F	M	N	M
Peas	P	P	P	Y	F	G	F	SL	P	L	CB	70	1.5 - 3	P	L	Y	M
Radishes	P	P	G	N	G	P	G	DH	G	F	CB	8	.25 - .5	P	L	Y	N
Rapeseed	F	F	G	N	F	F	G	MM	G	F	CB	5	.25 - .75	G	L	Y	N
Red clover	G	F	G	Y	G	F	F	SL	P	F	CB	5	.25 - .75	P	L	Y	M
Safflowers	F	F	G	N	F	P	P	DM	F	L	WB	30	.5-1	F	M	Y	M
Soybeans	P	P	F	Y	P-G**	F	F	SM	P	L	WB	35	1-1.5	P	L	Y	M
Spring wheat	G	G	G	N	G	F	F	MH	F	L	CG	60	.5 - 1.5	F	M	Y	M
Sudangrass	G	G	G	N	G	G	G	MM	G	L	WG	20	.5 - 1.5	F	M	Y	H
Sugar beets	P	P	G	N	F	P	G	DH	G	F	CB	4	.25 - .5	G	L	N	N
Sunflowers	F	F	G	N	F	P	G	DM	F	L	WB	7	.5-1	F	M	Y	M
Sunn hemp	F	F	F	Y	G	P	P	DM	F	L	WB	15	1.5-2	P	L	Y	Y
Sweet clover	G	F	F	Y	F	P	F	MM	F	F	CB	4	.25 - 1	F	L	Y	M
Tall wheatgrass	G	G	G	N	G	G	G	DH	F	L	CG	13	.25 - 1	G	H	N	M
Teff grass	F	G	F	N	F	G	F	SM	P	F	WG	5	.13 - .25	P	M	N	N/A
Triticale	G	G	G	N	G	F	F	MH	F	L	CG	60	.5-1.5	G	M	Y	M
Turnips	P	P	G	N	G	P	G	DH	G	F	CB	4	.25-.5	P	L	Y	N
White clover	G	F	G	Y	G	F	F	SL	P	F	CB	1.5	.25 - .75	P	L	Y	M
Winter camelina	F	F	G	N	F	P	P	ML	G	F	CB	3	.25-.5	P	L	Y	N
Winter wheat or rye	G	G	G	N	G	F	F	MH	F	L	CG	60	.75 - 2	G	M	Y	M

/1 Rooting Depth/Water 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

/2 Crop types

- CG= cool season grass
 - CB= cool season broadleaf
 - WB= warm season broadleaf
 - WG= warm season grass
- Shallow 6 - 18 inches
Medium 18 - 24 inches
Deep 24 + inches

Ratings

- L= Low
- M= Medium
- H= High
- Y= Yes
- N= No or None
- N/A= Not Available
- G= Good
- F= Fair
- P= Poor

*Variable depending on seed size and row spacing.
**Poor weed competitor, but herbicide-tolerant varieties are available.

/3 Seeding Dates

November 1 through May 15 – predominantly cool-season species
May 15 through August 1 – predominantly warm-season species
August 1 through October 1 – predominantly cool-season species
Seeding dates fluctuate annually. The dates listed above are averages that maybe changed 10 days in either direction depending on current climatic conditions.

/5 Buckwheat contamination

To reduce chances of buckwheat contamination in wheat do not rotate to wheat for grain for 2 years

/4 Full Seeding rates

Multiply by the percent desired if mixtures are used.