

Choosing a Cover Crop Species

Drilled/planted before Sept. 15







Aerial or high-clearance overseeded ~Aug. 15 - Sept. 15





Drilled/planted after Sept. 15







Seeding Rate Recommendations

Drilled/planted before Sept. 15

Aerial or High-clearance overseeded ~Aug. 15-Sept.15

Drilled/planted after Sept. 15

Small Grains			
Winter cereal rye*	~55 lb/ac	60-75 lb/ac	60-75 lb/ac [†]
Winter triticale**	~55 lb/ac	60-75 lb/ac	60-75 lb/ac [†]
Winter wheat**	~55 lb/ac	60-75 lb/ac	60-75 lb/ac [†]
Winter barley***	~60 lb/ac	60-75 lb/ac†	X
Oats***	~60 lb/ac	60-75 lb/ac†	X
Cool-season grass			
Annual ryegrass**	~15 lb/ac	~20 lb/ac	X
Brassicas (must be plan	nted with grasses)		
Rapeseed**	3-4 lb/ac	4-6 lb/ac	X
Brown mustard***	3-4 lb/ac	4-6 lb/ac [†]	X
Oilseed radish***	3-4 lb/ac	4-6 lb/ac [†]	X
Turnips***	3-4 lb/ac	4-6 lb/ac [†]	X
Legumes			
Hairy vetch**	15-20 lb/ac	X	X
Common vetch**	15-20 lb/ac	X	Х
Winter lentil**	50 lb/ac	X	X
Winter pea**	60 lb/ac	X	X

^{* =} should not winterkill ** = could winterkill *** = will winterkill

If growing cover crops for livestock forage, use upper range of seeding rates and see "Corn and Soybean Herbicides: Restrictions When Grazing or Feeding Cover Crops."

Cover Crops and Heat Units

Legumes and brassicas need more heat units than small grains to be effective.

The number of heat units (base 50°F) remaining in Iowa declines dramatically throughout the month of Septmember:

After Aug. 1: 1,385 After Sept. 1: 707 After Oct. 1: 246

Source: Iowa Environmental Mesonet

Minimum Germination Soil Temperatures

Cereal rye: 34°F

Other small grains: 38°F Annual ryegrass: 40°F Mustard/Rapeseed: 40°F

Turnip/Radish: 45°F

Vetches: 60°F Lentils/Pea: 41°F

Source: Midwest Cover Crops Field Guide: 2nd Edition

X = not recommended for this time and planting

[†] If receiving cost-share through government programs, please see USDA-NRCS Agronomy Technical Note 38: Cover Crop Management at bit.ly/2dXAGJ3 for NRCS recommended rates.