

Winter Rye – *Secale cereale*

Key Cultivars:

- Hancock
- Spooner
- Rymin
- Danko
- Hazlet

Climate Risk Notes:

Disease risk for winter rye increases with excess precipitation. An increase in extreme weather events, may cause these diseases to become more prevalent.

Absolute minimum temperature in winter is determined by many factors including snow cover. It is possible for winter rye to grow under snow, if the insulation keeps the soil at the high enough temperature.

	Key Months for Crop Development and Thresholds											
	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
Stage of growth (under current conditions)	Planting, Dormant ^{i, m}	Dormant ⁱ	Dormant ⁱ	Dormant, Vegetative growth ^k	Vegetative growth ^k	Flowering ^{k, m, q}	Flowering ^{k, m, q}	Harvest ^{d, i, l, m}	Harvest ^{d, i, l, m}		Planting ^{i, l, m, q}	Planting, Tillering ^{l, m}
Min Temp (°F)	-30 ^{e, g, o}	-30 ^{e, g, o}	-30 ^{e, g, o}	32 ^m	40 ^{a, h, o}	40 ^m	40 ^m	40 ^m	40 ^m		34 ^m	32 ^m
Max Temp (°F)	38 ^m	38 ^m	38 ^m	85 ^m	85 ^m	90 ^m	90 ^m	95 ^m	95 ^m		85 ^m	85 ^m
Ideal Precipitation (in/week)				1 ^{f, m}	1 ^{f, m}	0.5-0.8 ^{f, m}	0.5-0.8 ^{f, m}	1 ^{f, m}	1 ^{f, m}		1 ^{f, m}	1 ^{f, m}

Climate									Soil						
Min Optimal Temp (°F)	Max Optimal Temp (°F)	Min Absolute Temp (°F)	Max Absolute Temp (°F)	Germination Soil Temp (°F)	Growing Degree Days (40°F base)	Chilling Hours (32-45°F)	Min Rainfall (in/week)	Max Rainfall (in/week)	Min pH	Max pH	Optimal Soil Texture	Absolute Soil Texture	Optimal Soil Drainage	Absolute Soil Drainage	Soil Depth (in)
40 ^{a, h, o}	50 ^{b, c, o}	-30 ^{e, g, o}	95 ^{b, c, m, o}	>1 ^{a, j, o}	1000 ^{b, c, n}	NA ^m	0.5 ^{f, i, m, o}	3 ^{c, f, m, o}	4.5 ^{a, o, p}	8 ^{h, o, p}	Loamy sand, sandy loam, sandy clay loam, clay loam ^{h, l, p}	Sand, silt loam, silty clay loam, clay ^{a, h, i}	Well drained ^{l, j, p}	Somewhat excessively drained, moderately well drained, somewhat poorly drained ^{l, j, p}	36 ^{d, o, q}

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