

## Annual Flax – *Linum usitatissimum*

### Key Cultivars:

#### Fiber

- Avian
- Nathalie
- Lissette

#### Seed

- Omega (golden)
- Linton (brown)
- Rahab (brown)

### Climate Risk Notes:

**Retting** is required after harvesting flax for fiber to separate the individual fibers. Dewy mornings, characteristic of Wisconsin, are helpful for this retting process. However, without these dewy mornings, water retting is required which is very labor and water intensive.

**Excessive water** is a larger concern for flax than drought. Therefore, increases in the number and intensity of storms, characteristic of our changing climate, may make it difficult to grow flax in some areas.

**Fall planting** is not currently possible in Wisconsin due to the cold winters, but it does occur on the West Coast in places like Willamette Valley, Oregon. As temperatures in Wisconsin continue to increase and winters get milder, fall planting of flax may become viable.

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°C base)	Chilling Hours (32-45 °C)	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)
50 <sup>b, g, h</sup>	80 <sup>b, g, h</sup>	25 <sup>h, i, m</sup>	85 <sup>b, f, g</sup>	35-50 <sup>h, i, m</sup>	Flowers: 550 <sup>f, j, n</sup>  Fiber: 1000 <sup>f, j, n</sup>  Seed: 1200 <sup>f, j, n</sup>	NA	0.7 <sup>b, e, k, n</sup>	2.5 <sup>e, b, n</sup>	5.5 <sup>c, g, l</sup>	8 <sup>b, c, l</sup>	Loam, sandy loam, sandy clay loam, clay loam, silt loam, silty clay loam <sup>a, d, j</sup>	Loamy sand, clay, silt, silty clay <sup>b, d, j</sup>	Well drained <sup>d, j, n</sup>	Somewhat excessively drained, moderately well drained <sup>a, d, n</sup>	1 <sup>a, b, k, n</sup>

	Key Months for Crop Development and Thresholds											
	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
<b>Stage of growth</b> (under current conditions)					Planting <sup>i, m, n</sup>	Planting, Vegetative growth <sup>a, i, m, n</sup>	Vegetative growth, Flowering <sup>a, b, f</sup>	Flowering, Maturation, Harvest for fiber <sup>a, b, f</sup>	Maturation, Harvest for seed <sup>a, e, n</sup>			
<b>Min Temp (°F)</b>					25 <sup>a, g, i</sup>	25 <sup>a, g, i</sup>	32 <sup>b, k, o</sup>	32 <sup>b, k, o</sup>	32 <sup>b, k, o</sup>			
<b>Max Temp (°F)</b>					60 <sup>b, g, h, k</sup>	70 <sup>b, g, h, k</sup>	85 <sup>b, f, g</sup>	85 <sup>b, f, g</sup>	85 <sup>b, f, g</sup>			
<b>Ideal Precipitation</b> (in/week)					1-2.5 <sup>b, e, k</sup>	1-2.5 <sup>b, e, k</sup>	0.7-4 <sup>b, e, k</sup>	0.7-1.5 <sup>b, e, k</sup>	0.7-1.5 <sup>b, e, k</sup>			

## References

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