

## Ginseng – *Panax quinquefolium*

### Key Cultivars:

When growing ginseng, different cultivars are not used. However, the length of the ginseng is mainly determined by the texture of the soil.

### Climate Risk Notes:

**Light conditions** for ginseng are bit unique. Ginseng requires about 80% shade, which makes forests the ideal growing site for ginseng. Black walnut, sugar maple, and poplar trees are grown with ginseng as well. For more commercial growth, shade structures are built.

**Growth** for 3 to 5 years is needed to produce a marketable ginseng crop from seed.

**Diseases** are becoming more prevalent due to the change in rain patterns. For ginseng, root rot and leaf blight are the primary diseases, which are made worse by excess moisture.

	<i>Key Months for Crop Development and Thresholds</i>											
	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
<b>Stage of growth</b> <i>(under current conditions)</i>	Dormant <sup>g</sup>	Dormant <sup>g</sup>	Dormant <sup>g</sup>	Dormant <sup>g</sup>	Dormant, Emergence <sup>g</sup>	Emergence, Vegetative growth <sup>g</sup>	Vegetative growth, Flowering <sup>g</sup>	Flowering <sup>g</sup>	Planting <sup>g</sup>	Planting, Harvest <sup>g</sup>	Harvest <sup>g</sup>	Dormant <sup>g</sup>
<b>Min Temp (°F)</b>	-35 <sup>a, b, e</sup>	-35 <sup>a, b, e</sup>	-35 <sup>a, b, e</sup>	-35 <sup>a, b, e</sup>	-35 <sup>a, b, e</sup>	32 <sup>g</sup>	32 <sup>g</sup>	32 <sup>g</sup>	32 <sup>g</sup>	32 <sup>g</sup>	32 <sup>g</sup>	-35 <sup>a, b, e</sup>
<b>Max Temp (°F)</b>	60 <sup>g</sup>	60 <sup>g</sup>	60 <sup>g</sup>	60 <sup>g</sup>	110 <sup>b, c, g, j</sup>	110 <sup>b, c, g, j</sup>	110 <sup>b, c, g, j</sup>	110 <sup>b, c, g, j</sup>	110 <sup>b, c, g, j</sup>	110 <sup>b, c, g, j</sup>	110 <sup>b, c, g, j</sup>	60 <sup>g</sup>
<b>Ideal Precipitation (in/week)</b>					1 <sup>g</sup>	1 <sup>g</sup>	1 <sup>g</sup>	1 <sup>g</sup>	1 <sup>g</sup>	1 <sup>g</sup>	1 <sup>g</sup>	

<i>Climate</i>									<i>Soil</i>						
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/year)	Max Rainfall (in/year)	Min pH	Max pH	Optimal Soil Texture	Absolute Soil Texture	Optimal Soil Drainage	Absolute Soil Drainage	Soil Depth (in)
60 <sup>a, b, d</sup>	80 <sup>a, b, c</sup>	-35 <sup>a, b, e</sup>	110 <sup>b, c, g, j</sup>	>50 <sup>g</sup>	NA <sup>g</sup>	1000 <sup>a, d, i</sup>	20 <sup>a, b, g, j</sup>	55 <sup>a, b, g, j</sup>	6 <sup>a, b, f, g</sup>	7.5 <sup>a, b, f, g</sup>	Loam, sandy loam, loamy sand, silty loam, sandy clay loam <sup>a, h, j</sup>	Clay loam, silty clay loam, sandy clay <sup>a, f, j</sup>	Well drained <sup>a, b, f</sup>	Somewhat excessively drained, excessively drained <sup>a, b, f</sup>	8 <sup>a, g, h, j</sup>

## References

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