

Serviceberry / Saskatoon – *Amelanchier spp., A. alnifolia*

Climate								Soil						
Min Optimal Temp (°F)	Max Optimal Temp (°F)	Min Absolute Temp (°F)	Max Absolute Temp (°F)	Growing Degree Days (°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)
-38 ^{a,h,i}	90 ^{a,h,i}	-62 ^{a,h,i}	93 ^{a,h,i}	N/A	N/A	18 ^{a,h,i}	210 ^{a,h,i}	4.8 ^{b,j,k}	8.4 ^{b,j,k}	silty clay loam, sandy clay loam, loam, silt loam, sandy loam ^{b,j,k}	clay, sandy clay, silty clay, clay loam, loamy sand, silt, sand ^{b,j,k}	well drained, moderately well drained ^{b,j,k}	somewhat excessively drained, somewhat poorly drained, poorly drained, very poorly drained ^{b,j,k}	20 ^{d,h,i}

	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)	Dormant	Dormant	Dormant	Dormant	Budbreak ^{e,g}	Budbreak, Flowering, Fruit Development ^{e,g}	Leaf Out, Fruit Development ^{e,g}	Fruit Ripening, Harvest ^{e,g}	Vegetative Growth ^{e,g}	Vegetative Growth ^{e,g}	Leaf Drop ^{e,g}	Dormant

Key Cultivars: ^{e,g}

There are several native species of serviceberry (*Amelanchier spp.*). The only one that is cultivated is saskatoon (*A. alnifolia*). Its native range extends throughout much of northwestern Canada and the U.S., but ends at Wisconsin. The following cultivars are all saskatoons selected for the fruit quality from the Canadian wild.

- 'Honeywood' (flowers late, early fruiting, high yielding, smaller fruit with tannins)
- 'JB30' (low suckering, flowers late, early fruiting, large fruit, high yielding)
- 'Martin' (moderate suckering, early fruiting, large fruit)
- 'Nelson' (flowers late, some resistance to juniper-apple rust)
- 'Northline' (high suckering, high yielding, precocious, smaller shrub form good for sideways harvester)
- 'Pembina' (low suckering, ornamental, recommended for home plantings)
- 'Smoky' (high suckering, flowers later than other cultivars, ripens late, smaller fruit and subpar flavor)
- 'Thiessen' (low suckering, early fruiting, large fruit, high yielding, favored for value-added)
- 'Lee 8' (high yielding, ripens late)

Climate Risk Notes: ^{e,g}

Saskatoon is extremely cold hardy and has been known to survive winter temperatures of -40°F. It is actively grown in the Canadian prairies (Saskatchewan Province).

Saskatoon flowers are sensitive to fluctuating temperatures and late spring frosts. They have been known to be killed by 35°F temperatures or lower. Choose late flowering cultivars to reduce this risk. It is also recommended to plant more than one cultivar. This will reduce the risk of total crop loss due to a late frost as well as spread out the ripening and harvesting period.

Saskatoon plantings can benefit from windbreaks. When designed right, windbreaks can protect against winter injury and also create microclimates ideal for fruit production.

A wet spring and summer can increase the incidence of fungal pathogens such as Entomosporium leaf and berry spot and juniper-apple rust. Saskatoons have just as many pests and diseases as apples. Large-scale organic production is typically not possible.

References

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