Saskatoon (Amelanchier alnifolia)

Other names: Serviceberry, Juneberry, Amelanchier (French) and Shadbush.

Background

The saskatoon shrub is in the rose family (*Rosaceae*): the same family as apples, plums, and cherries (U of A: Plantwatch). Saskatoons appeared to have been named after a shortened version of the Blackfoot name for the berry: *misask-a-tomina* (Parish et al 1996) or the Cree name: *mis-ask-quah-toomina* (U of A: Plantwatch). The Latin nomenclature is less clear: the origin of Amelanchier is uncertain although this is what the French call the plant, and alnifolia means alder-leafed (Hebda 1995).

Plant Morphology

The saskatoon is a highly variable shrub, 1-7 metres tall with smooth dark gray to reddish bark (Turner 1997). It often propagates through underground stems and forms dense thickets. The thin leaves are round to oval-shaped (2-5 cm) with toothed edges, mostly on the upper half. In autumn, the leaves turn yellowish-orange to reddish-brown. The flowers are white, showy and fragrant with linear petals that narrow toward the base. The flowers occur in leafy clusters at the tips of the branches. The fruits are purple to nearly black, berry-like pomes (apple-like), with a white bloom (white powdery coating). The "berries" are sweet and edible (Parish et al 1996) but sometimes quite seedy (Turner 1997). Botanists recognize three varieties in the Interior Salish area although the Salish peoples identify up to nine (Ibid.).

Ecology

In British Columbia, Saskatoons are an extensive species common in dry woods and open hillsides on well-drained soils (Turner 1997). They are also occasionally found at subalpine elevations in dry open forests, on warm aspects (Parish et al 1996). In the southern interior, they are commonly found in open canopy Douglas-fir (*Pseudotsuga menziessii*) and lodgepole pine (*Pinus*

contorta) stands on water-shedding sites. The presence of the saskatoon shrub is characteristic of young-seral forests on disturbed sites. In Canada, the occurrence of saskatoons increases with increasing continentality and decreases with increasing precipitation and elevation (Klinka et al 1989). Figure1 shows the biogeoclimatic zones and subzones that Amelanchier alnifolia can be found in the southern interior of BC (Province of BC – Ministry of Forests 1983).

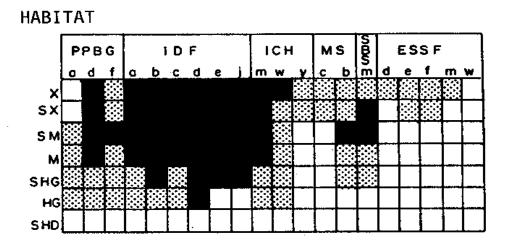


Figure 1. The darkened areas indicate where the plant is more common and abundant; the dotted areas indicate where the plant has limited distribution and abundance.

Food

In British Columbia, the saskatoon was the most popular and widely used berry for central and southern native peoples. Historically, saskatoons were a common item of trade between interior and coastal people. The Salish people recognized up to nine different varieties of saskatoon according to habitat, flowering and ripening time, growth form and size, colour, seediness and flavour (Turner 1997). Certain varieties were more likely to be dried fresh like raisins for winter use, while others were cooked to the consistency of jam before being dried. The juice of saskatoon berries was used to marinate other foods such as black tree lichen or roots to make them sweeter (Turner et al 1990).

The berries are an excellent source of vitamin C, manganese, magnesium, iron and a good source of calcium, potassium, copper and carotene. Because the

edible seeds are consumed, the berries are also higher in protein, fat and fibre than most other fruits (U of A: Plantwatch).

Medicine

The Thompson people made a tea from the twigs and stems and gave it to women who had just given birth as well as it was used as a bath for women to sit in. A very strong tonic was made from the bark and given to women immediately following childbirth to hasten the delivery of the placenta. A weaker mixture of this tonic was also used to ease stomach troubles (Turner et al 1990). Saskatoon juice was also taken to relieve stomach upset: boiled, it was used as ear drops (Kershaw 2000).

Warning

The leaves and pits contain a poisonous cyanide-like substance that can cause serious health problems. Cooking or drying destroys these toxins (Kershaw 2000).

Commercial Production

Today, saskatoons remain an important food source to native and non-native people alike. To meet increasing demands for saskatoon products, commercial production is expected to double over the next few years. As with most agricultural crops, the saskatoon is not immune to pests: the most troublesome being the woolly elm aphid (WEA). The Alberta Research Council has conducted laboratory and field studies to determine the life history of WEA to aid growers in the monitoring of this pest. An integrated pest management approach is currently under evaluation (Alberta Research Council).

Other Uses

The Thompson people used the hard wood of the saskatoon to make many objects. These included: combs, digging sticks, firedrills, and arrows, tool handles, salmon spreaders and reinforcement for dipnet hoops (Turner et al.)

1990). The Plains people used the wood for canes, canoe crossbars, basket trims, tipi stakes and tipi closure pins, as well as the berries provided purple dyes (Kershaw 2000).

The saskatoon provides important winter browse for many ungulates. Many bird species eat the berries when they are ripe in late summer (Parish et al 1996) as do bear. It is also noted that some birds make use of the berries that remain on the branches during the fall and winter.

References

Alberta Research Council. Agriculture/Biotechnology. *Pest management solutions for berry growers*. P 1. http://www.arc.ab.ca/whatsnew/SuccessAgric.asp

Hebda, Richard. 1995. *Natural History - Saskatoon Berry*. Royal British Columbia Museum. Pp 1-3. http://rbcm1.rbcm.gov.bc.ca/nh_papers/nativeplants/amelalni.html

Kershaw, Linda. 2000. *Edible & Medicinal Plants of the Rockies*. Lone Pine: Publishing, Edmonton. P 69.

Klinka, K., V.J. Krajina, A. Ceska and A.M. Scagel. 1989. *Indicator Plants of Coastal British Columbia*. UBC Press: Vancouver. P 76.

Parish, Roberta, Ray Coupe and Dennis Lloyd (eds). 1996. *Plants of Southern Interior British Columbia*. Lone Pine Publishing: Vancouver. P 55.

Province of BC – Ministry of Forests. 1983. *A Guide to Some Common Plants of the Southern Interior of British Columbia* - Land Management Handbook Number 7. Information Services Branch. Victoria. P 21.

Turner, Nancy J. 1997. *Food Plants of Interior First Peoples*. UBC Press: Vancouver. P 139.

Turner, Nancy J, Laurence C. Thompson, M. Terry Thompson and Annie Z. York. 1990. *Thompson Ethnobotany*. Royal British Columbia Museum: Victoria. Pp 253-257.

University of Alberta. *Saskatoon. Devonian Botanic Garden: Plantwatch*. Pp 1-5. http://www.devonian.ualberta.ca/pwatch/saskat.htm