Scientific Name: *Ribes glandulosum* Grauer Family: *Grossulariaceae* 

Common Names: skunk currant, skunk red currant, skunkberry, fetid currant



## **Plant Description**

Deciduous shrub, stems up to 1 m long, spreading; bark purplish brown to grey; skunk-like odor when bruised; leaves alternate, 2 to 8 cm long, 2 to 7 cm across, 5 to 7 lobes, underside with glandular hairs; flowers are white or reddish, 2 to 2.5 mm long with 5 petal and 5 sepals (Royer and Dickinson 2007). Fruit: Dark red berry, bristly, about 6 mm across (Royer and Dickinson 2007). Seed: Irregular, generally ovoid, reddish brown seed with rough texture. Approximately 1 to 1.5 mm long.

# Habitat and Distribution

North Carolina (Moss 1983).

*Ribes glandulosum* is found in moist woodlands and clearings (Moss 1983). Seral Stage: Found on edges, likely early seral. Soil: *Ribes sp.* prefer cool moist soil, well drained clay loam; pH 6 to 7.5 (Alberta Agriculture 1993). Distribution: Alaska, Yukon, southwestern District of Mackenzie to James Bay, northern Quebec, Newfoundland south to British Columbia, Alberta, Saskatchewan, Manitoba, Great Lakes, New York;



**Ribes glandulosum flowers** 

# Phenology

Flowers bloom May to July. Fruit ripen from July to September (Young and Young 1992).











## Pollination

The majority of pollination is done by insects (McGregor 1976).



# Seed Dispersal

Animal dispersed by numerous predators (Ulev 2006).

## Genetics

2n=16 (Moss 1983).

### **Symbiosis**

None known.

### Seed Processing

Collection: The fruit should be picked off the shrub as soon as they are ripe to reduce losses due bird and animal consumption (Young and Young 1992). Seed Weight: 0.87 g/1,000 seeds. Fruit/Seed by Weight: 91,000 seeds/kg of berries. Fruit/Seed by Volume: 44,000 seeds/L of berries. Average Seed/Fruit: 14. Harvest Dates: End of July or early August. Cleaning: Seeds should be macerated and the seeds recovered by floatation (Young and Young 1992). Storage Behaviour: Unknown. Likely orthodox: seeds can be dried prior to cold storage. Storage: Dried seeds can be stored for long periods in sealed vials at low temperature (Young and Young 1992).

Longevity: Can remain viable for 17 years under "normal storage" conditions (Plants for a Future n.d.).

## Propagation

Natural Regeneration: Reproduces by seed and vegetatively by layering (Ulev 2006).

Germination: Germination percentages are low despite long periods of cold stratification.

Pre-treatment: *Ribes* spp. are usually highly dormant and require a cold stratification followed by a warm stratification followed by a second cold stratification (Young and Young 1992).

Direct Seeding: *Ribes* seeds are usually sown in the fall and covered with 0.6 cm of mulched soil (Young and Young 1992).

Seed Rate: 630 to 830 seeds/m<sup>2</sup> (Young and Young 1992).



*Ribes glandulosum* shrub with ripe berries









Vegetative Propagation: Can reproduce by layering. Cuttings can be taken in the fall after the leaves have dropped (Alberta Agriculture 2000). Make cuttings 20 to 25 cm long; lower cut should be right below a bud and the upper cut should be diagonal and about 1 cm above the top bud. Store the cuttings in a cold frame under 30 cm of soil (Alberta Agriculture 2000).

Plant early in the spring in 20 cm wide trench. Plant 15 cm apart by laying them in the trench so that a single bud is above the soil. Keep the soil moist to encourage rooting (Alberta Agriculture 2000).

### **Aboriginal/Food Uses**

Food: Currants can be eaten fresh or cooked to make jelly (Marles et al. 2000). The stems of the plant can be made into a bitter tea (Marles et al. 2000). Medicinal: A decoction of the stem was given to prevent blood clotting after birth (Marles et al. 2000).

#### Wildlife/Forage Usage

Wildlife: *Ribes* spp. are used as food by wildlife, including rodents, birds and hooved browsers. It is used as shelter for many smaller animals (Ulev 2006).

Livestock: *Ribes* spp. can be poor to fair forage for livestock (Ulev 2006).

### **Reclamation Potential**

As an edge species, *Ribes glandulosum* could make a good candidate for reclamation.

### **Commercial Resources**

Availability: Not available commercially in Alberta (ANPC 2010). Uses: No known commercial uses.

### Notes

*R. glandulosum* is listed as 93% intact (less occurrences than expected) in the Alberta oil sands region (Alberta Biodiversity Monitoring Institute 2014).

*Ribes* species including *R. glandulosum* are the initial host to the blister rust fungus (*Cronartium ribicola*) as part of a two stage cycle which ends in the fungus infecting white pine, which can eventually kill the tree (Zambino 2010).

### **Photo Credits**

Photo 1 and 2: François Gros d'Aillon. Professeur honoraire de l'UQÀM.

Photo 3: Wild Rose Consulting, Inc. 2011. Line Diagram: John Maywood, used by permission of Bruce Peel Special Collections, University of Alberta.

#### References

Alberta Agriculture, 2000. Currants and gooseberries in Alberta. Alberta Agriculture, Edmonton, Alberta. Agdex 236/ 20-1. 3 pp.

http://www1.agric.gov.ab.ca/\$department/deptdocs.n sf/all/agdex3480/\$file/236\_20-1.pdf?OpenElement [Last accessed July 3, 2013].

Alberta Biodiversity Monitoring Institute, 2014. The status of biodiversity in the oil sands region of Alberta. Alberta Biodiversity Monitoring Institute, Edmonton, Alberta. 47 pp. http://www.abmi.ca/FileDownloadServlet?filename= The% 20Status% 200f% 20Biodiversity% 20in% 20the % 20Oil% 20Sands% 20Region% 20of% 20Alberta 201 4\_Supplemental% 20Report.docx&dir=REPORTS\_U PLOAD [Last accessed June 16, 2014].

ANPC (Alberta Native Plant Council), 2010. Native Plant Source List.

http://www.anpc.ab.ca/assets/ANPC\_2010\_Native\_Pl ant\_Source\_List.pdf [Last accessed June 14, 2013].

Marles, R.J., C. Clavelle, L. Monteleone, N. Tays and D. Burns, 2000. Aboriginal Plant Use in Canada's northwest Boreal Forest. Natural Resources Canada and Canadian Forest Service. UBC Press, Vancouver, British Columbia. 368 pp.













McGregor, S.E., 1976. Insect pollination of cultivated crop plants. U.S Department of Agriculture, Washington, DC. 411 pp.

Moss, E.H., 1983. Flora of Alberta. A manual of flowering plants, conifers, ferns, and fern allies found growing without cultivation in the province of Alberta, Canada. 2nd edition. University of Toronto Press, Toronto Ontario. p. 344.

Plants for a Future, n.d. *Ribes glandulosum* - Grauer. Plants For A Future, Dawlish, Devon, UK. <u>http://www.pfaf.org/user/Plant.aspx?LatinName=Rib</u> <u>es+glandulosum</u> [Last accessed June 14, 2013].

Royer, F. and R. Dickinson, 2007. Plants of Alberta. Lone Pine Publishing, Edmonton, Alberta. 527 pp. Ulev, E.D., 2006. *Ribes triste*. IN: Fischer, W.C. (compiler). The fire effects information system. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory.

http://www.fs.fed.us/database/feis/plants/shrub/ribtri/ introductory.html [Last accessed July 3, 2013].

Young, J.A. and C.G. Young, 1992. Seeds of woody plants in North America. Dioscorides Press, Portland, Oregon. 407 pp.

Zambino, P.J., 2010. Biology and pathology of *Ribes* and their implications for management of white pine blister rust. Forest Pathology 40: 264-291.









