Plant Data Sheet

Species (common name, Latin name)
Ribes cereum, western red currant

Range
Ribes cereum can be found in woods, thickets, rocky areas, and from sagebrush areas to sub alpine ridges, in most parts of MT, from B.C. through OR and southward to southern CA, NE, CO, NM and AZ.

Local occurrence (where, how common)
Ribes cereum is listed as imperiled to critically imperiled in the state of Washington
See attached map for distribution in Washington by county.

Habitat preferences
Full sun to part shade, low to moderate water (minimum of 330mm precipitation/year), and at an elevation between 1500m and 4000m. The species grows on rocky, gravelly, and well-drained soils. Often found in canyons, dry ravines, hillsides, prairies and open woodland.

Plant strategy type/successional stage (stress-tolerator, competitor, weedy/colonizer, seral, late successional)
Shade from their crowns shelters conifer seedlings and thus aids forest succession.
Plant itself is shade intolerant.

Associated species
?

May be collected as: (seed, layered, divisions, etc.)
Seeds are collected from fruit, can also be started from cuttings of semi-hardened wood.

Collection restrictions or guidelines
Red berries containing numerous seeds ripen from July to August. Berries should be collected as soon as possible after ripening to limit losses to birds. The process of separating wax current seeds from pulp begins by soaking the berries overnight in tap water and allowing them to ferment for 48 hours. Berries are then mashed, dried and processed in a rubbing box. This box is straight–sided with a rigged, rubber mat covering the bottom. A wooden block (also with a rigged covering) is used to rub the seeds in the box, which breaks the connection between seeds and pulp. Finally, a Dakota blower is used to separate seeds from pulp, but careful threshing in front of a strong fan can also separate the seed/pulp mixture. By this method, the non-separated mixture is placed on a wide pan and tossed gently in the air in front of the fan—the debris is blown away while the heavier seeds remain. Viability of the seed lot can be improved by discarding seeds that float during soaking, but some viable seeds may be discarded along with non-viable seeds. Cleaned seeds are refrigerated until use.

Seed germination (needs dormancy breaking?)
Seeds require 4 to 5 months of cold stratification (at temperatures near freezing) after which they can be planted in the spring.

Seed life (can be stored, short shelf-life, long shelf-life)
Under normal storage conditions the seed can remain viable for 17 years or more.

Recommended seed storage conditions

Embryo dormancy is the primary dormancy mechanism in wax currant and is overcome by stratification. Seed coat dormancy affects fewer seeds within each lot, but germination can be further improved, if seed coat dormancy is overcome by treatment with 3% hydrogen peroxide. Seeds are soaked 4 hours in 3% hydrogen peroxide and then stratified for 120 days at 3 to 5 C. Hydrogen peroxide treatments involve submersing seeds in a sufficient volume of hydrogen peroxide to completely cover the seeds and stirring vigorously for at least 30 seconds at the start of treatment. Following treatment, the seeds are rinsed under running tap water for several minutes and then soaked briefly in several changes of fresh water. Seeds are then soaked overnight (8-12 hours) in water and stratified naked (without media) at 3 to 5 C within self-sealing plastic bags left slightly open to allow air movement. Seeds are rinsed every month or so during stratification to reduce microbial contamination. Germination occurs during the 4-month stratification period, especially in the later stages of the treatment. After 60 days of stratification, seeds are checked every other week, and germinants are removed and transplanted. Removing germinants frequently helps to reduce fungal build up in the seed lot during the remainder of stratification, and increases the survival odds for those seeds germinating during stratification.

Propagation recommendations (plant seeds, vegetative parts, cuttings, etc.)
Prick out the seedlings into individual pots when they are large enough to handle and grow them on in a cold frame for their first winter, planting them out in late spring of the following year. Cuttings of half-ripe wood, 10 - 15cm with a heel, July/August in a frame. Cuttings of mature wood of the current year's growth, preferably with a heel of the previous year's growth, November to February in a cold frame or sheltered bed outdoors. Cuttings of half-ripe wood, 10 - 15cm with a heel, July/August in a frame. Cuttings of mature wood of the current year's growth, preferably with a heel of the previous year's growth, November to February in a cold frame or sheltered bed outdoors.

Soil or medium requirements (inoculum necessary?)
Grows on well-drained soils of the full range of textures, which have developed from a wide variety of parent materials. These soils are often rocky or gravelly.

Installation form (form, potential for successful outcomes, cost)
?

Recommended planting density
Seeds are sown in mid September using an Oyjard seed drill at a depth of 0.12 inches. Seeds are lightly covered and irrigated when soils appear to be drying out on warm days. Desired field density is 30 shrubs per square foot.

Care requirements after installed (water weekly, water once etc.)
?

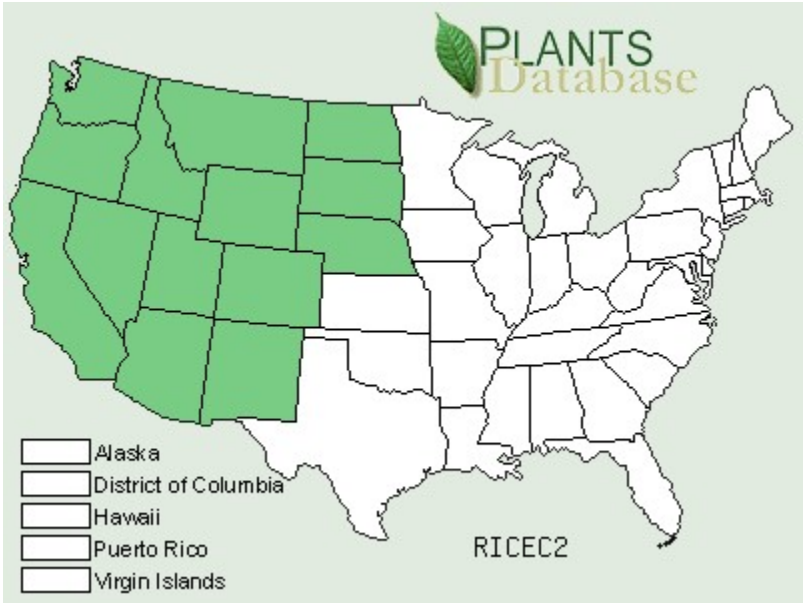
Normal rate of growth or spread; lifespan
Moderate lifespan, upright small shrub reaching to 5 feet with an open crown

Sources cited
http://www.cwnp.org/photopgs/rdoc/ricereum.html
http://www.fs.fed.us/global/iitf/pdf/shrubs/Ribes%20cereum.pdf
http://plants.usda.gov/java/profile?symbol=RICEC2
http://pfaf.org/database/plants.php?Ribes+cereum
http://www.ibiblio.org/pfaf/cgi-bin/arr_html?Ribes+cereum
http://nativeplants.for.uidaho.edu/network/view.asp?protocol_id=2343

Data compiled by (student name and date)

Jack Hebert 4/12/2006

Other Notes
Plants can harbor a stage of 'white pine blister rust', so they should not be grown in the vicinity of pine trees.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