University of Idaho Extension

Forest Management No. 42

UI Extension Forestry Information Series

Where in the world is *Ribes?*

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Many Idaho forest owners are familiar with the disease called white pine blister rust. White pine blister rust was introduced to the western North America in 1910 on infected seedlings from France. The disease devastated western white pine forests, since white pine had very little natural resistance to the disease.

Blister rust does not spread directly from tree to tree. It has a complex life cycle that requires a shrub in the genus *Ribes* (gooseberries and currants) to produce the spores that infect white pine. Without this alternate host, white pine cannot be infected by blister rust.

From the 1930s through the 1960s, many people were employed to remove *Ribes* plants in an effort to reduce blister rust infections on white pine. *Ribes* eradication has been given up as a method to control blister rust (in part because *Ribes* seeds survive many years in the forest floor), but *Ribes* density still figures into decisions to plant, thin, or prune white pine.

Identifying *Ribes.* *Ribes* can be difficult for a novice (and many not-so-novices) to identify. *Ribes* plants are typically 2-3 feet tall, but grow as tall as 7 feet. They have small maple-like leaves and small, pea-sized fruits developing in late summer. A number of *Ribes* species are found in the Inland Northwest, but prickly currant and sticky currant are the most common in forests. Prickly currant (*Ribes lacustre)* is distinguished by many small, sharp prickles and small glossy-green leaves. It also has dark purple berries covered with hairs. Sticky currant (*Ribes viscosissimum*) has a velvety leaf covered with soft, sticky hairs on both surfaces. It feels moist to the touch and has blue-black, sticky berries.

Many forest plants are frequently mistaken for *Ribes*. The plants described below all have vaguely maple-like leaves and occur as shrubs of varying sizes. Also, many plant characteristics (e.g. leaf size, color) change with the season and the site (smaller & paler on dry sites and earlier in season) These tips should help key you in to characteristics that quickly distinguish these plants from *Ribes*. Flowers are an excellent way distinguish between many of these plants, but are not available all season, so we have focused on other plant characteristics.

Thimbleberry (*Rubus parvifolius*). In the early summer, thimbleberry's young undeveloped leaves make it easy to confuse with sticky currant. Later in the summer, this plant is easily distinguished by its large leaves (4-6 inches across). Thimbleberry leaves are soft, but they are not moist like sticky currant. Thimbleberry stems are glandular, as distinguished from *Ribes* stems which are woody. In mid-summer thimbleberry has half-dollar sized white flowers, that later develop into large, vivid scarlet berries similar to raspberries.

Ninebark (*Physocarpus malvaceous*). The main feature that distinguishes ninebark from *Ribes* is its brown, papery, shredding bark. Older bark on sticky currant also shreds, but it is more reddish in color. Ninebark usually has clusters of dry, brown fruits (not berries). Ninebark also has hairs underneath the leaf that look "star-like" when magnified by a hand lens.

Goldthread (*Coptis occidentalis*). Goldthread is a low-growing plant with small, shiny evergreen leaves reminiscent of prickly currant. Growth habit is the

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primary characteristic that distinguishes goldthread from *Ribes*. Goldthread normally trails along no more than 6 inches above the ground. Roots are also a good key. Rub the outer bark off goldthread's roots and you will see a yellowish-golden color that gives the plant its name.

Ocean spray (*Holodiscus discolor*). Ocean spray is typically a larger shrub than *Ribes* with clusters of arching stems. It is also distinguished by coarsely toothed leaves that are more "oak-like" than "maple-like", a large white spongy pith, and dense pyramid shaped clusters of tiny flowers that are white in summer, then turn brown and hang on through the winter.

Raspberry ("Black-caps") *(Rubus* spp.*).* Raspberries are often confused with prickly currant because of their prickles. Raspberries frequently occur as a trailing vine, but you occasionally see single, upright, 2-3 foot tall raspberry stalks – a form prickly currant takes as well. The key feature to distinguishing between the two are raspberry's compound leaves (with three leaflets like strawberry).

Rocky Mountain Maple (*Acer glabrum*). Rocky Mountain maple is occasionally confused with *Ribes* because of the leaf shape. The quickest way to distinguish between the two is to look at leaf and branch arrangement; maples have opposite arrangement; *Ribes* has alternate arrangement.

Photos are obviously very valuable in identifying these plants. The following reference guides will also be a great help, whether you are trying to assess blister rust hazard, or just want to be able to identify forest shrubs:

- *Field Guide to Forest Plants of Northern Idaho*. 1985. Field guide to forest plants of northern Idaho. U.S. Forest Service General Technical Report. INT-180. 246 pp.
- *Plants of Southern Interior British Columbia*. 1996. Parish, Coupe, & Lloyd. Lone Pine publishing, Redmond, WA. 463 pp.

Special thanks to Steve Brunsfield and John Schwandt for review and comment.

This article first appeared in Woodland NOTES, Vol. 15, No. 2.

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