Plant Parentage Complicates Native Status

Our research

When sourcing plants for a study of pollinators on native plants and native cultivars, we learned how difficult it can be to determine if a plant can reasonably be considered native to a region. In horticulture, there is no universally accepted definition for a native plant. You may consider a native cultivar to be native, while your neighbor may limit their definition of native plants to ecotypes. In addition, changes in taxonomic classification and difficulties with determining the parent plants of native cultivars can complicate our understanding of a plant's genetic makeup. This brief defines native status, discusses parentage of native cultivars, and recommends how to find plants that meet your definition of "native."

What we found

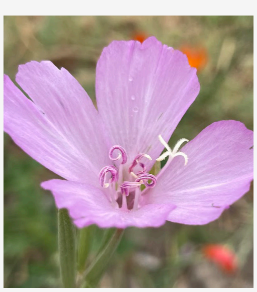
Sidalcea asprella ssp. *virgata* (Oregon Native)

- The taxonomy of *Sidalcea malviflora* (dwarf checkerbloom) was recently revised[1]. As a result, three subspecies were moved to the sister species *Sidalcea asprella*. Now, only *S. malviflora* ssp. *patula* is considered native to Oregon, with a range limited to SW Oregon.
- *Sidalcea asprella* is native to a much larger region of Oregon, and may be a better plant choice for many Oregon native plant gardens. Subspecies for sale at local nurseries might still be called *S. malviflora*, because it takes time for taxonomic changes to be implemented in commercial trade.

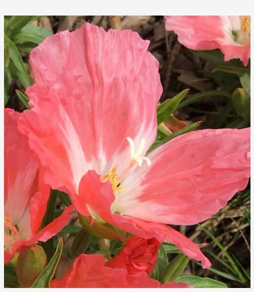
Sidalcea malviflora spp. *laciniata*, (CA native)
Photo by Scott Yarger

- *Achillea millefolium* (yarrow) is native to many regions across the United States. In the Palisades region of California, the plant has adapted to the more extreme climate by producing more trichomes (plant hairs), which makes its foliage silvery.
- *A. millefolium* 'Calistoga' is a cultivar of yarrow, selected from a wild-growing population in the Palisades. Though it has a cultivar name, the plant could be considered an ecotype, particularly for gardens in or near the Palisades.

Achillea millefolium 'Calistoga'



Clarkia amoena ssp. *lindleyi*



C. amoena 'Aurora'

- *Clarkia amoena* (farewell-to-spring) has numerous subspecies, some of which are native to Oregon (e.g., *C. amoena* ssp. *lindleyi*), and others that are only native to California (e.g., *C. amoena* ssp. *whitneyi*).
- Cultivars of farewell-to-spring are primarily developed from the *whitneyi* subspecies. Native cultivars, then, may not be representative of subspecies found in Oregon.

Glossary

- **Native plant:** defined in restoration ecology as a plant growing in a particular region, prior to European settlement. Native plant status is tied to a geographic scale, such as native to North America, native to Oregon, or native to the Willamette Valley.
- **Native cultivar:** a named, cultivated variety of a plant derived from a native plant species. Cultivars may be selected from wild populations or bred for specific plant traits. e.g., *Achillea millefolium* 'Calistoga'.
- **Subspecies:** a plant population geographically isolated from others of the same species, e.g., *Clarkia amoena* ssp. *lindleyi*
- **Ecotype:** a plant that is adapted to grow in a specific ecological region. Its form, function, and growth habits are well adapted to the place where it grows.

How does this relate to your garden?

A basic understanding of botanical taxonomy and nomenclature is important for gardeners sourcing native plants, because plants available in commercial markets may not be equivalent to the plants growing locally or in wild populations. This could result in poor plant performance if the plant is adapted to a region with different environmental conditions. Since subspecies are able to interbreed, non-native subspecies can cross with native subspecies, which may result in intermediate plant forms or poorly adapted plants.

To verify a plant's native status, you can reference local organizations that provide robust, up-to-date taxonomic information (e.g., OregonFlora, Burke Herbarium, or CalScape). Buying plants from local, native plant nurseries can help ensure that the plant you're seeking comes from the right species (or subspecies) for your region.

Additional Information

- [1]Halse RR. 2020. New combinations in *Sidalcea* (Malvaceae). Journal of the Botanical Research Institute of Texas. 14(1):9–10. https://doi.org/10.17348/jbrit.v14.i1.891
- OregonFlora, available from oregonflora.org
- See our handout on reading plant labels and more Garden Ecology Lab Briefs, by visiting the "For Gardeners" page on gardenecology.oregonstate.edu.

Master Gardener™ Advice

- Contact your local extension office for Master Gardener advice, or look for Master Gardeners at local farmers' markets.
- For more 10-Minute University™ handouts, videos, and the class schedule, visit cmastergardeners.org.

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