

Native Cultivars ≠ Native Plants in Pollinator Gardens

Our research

When shopping for native plants, gardeners may encounter cultivated varieties (cultivars) of native plants for sale. Cultivars are often bred for aesthetic traits, including novel flower colors, compact habit, or larger flowers, but these traits may limit a plants' ability to support pollinators. Studies that have examined pollinator visitation to native plants and cultivars have not yielded a clear and consistent answer, and no studies had previously been conducted in the Pacific Northwest (PNW). We thus collected pollinators and conducted 5-minute observations of their visits to PNW native plants and cultivars over 3 years (2020-2022) to see if pollinators had a preference for either plant type.

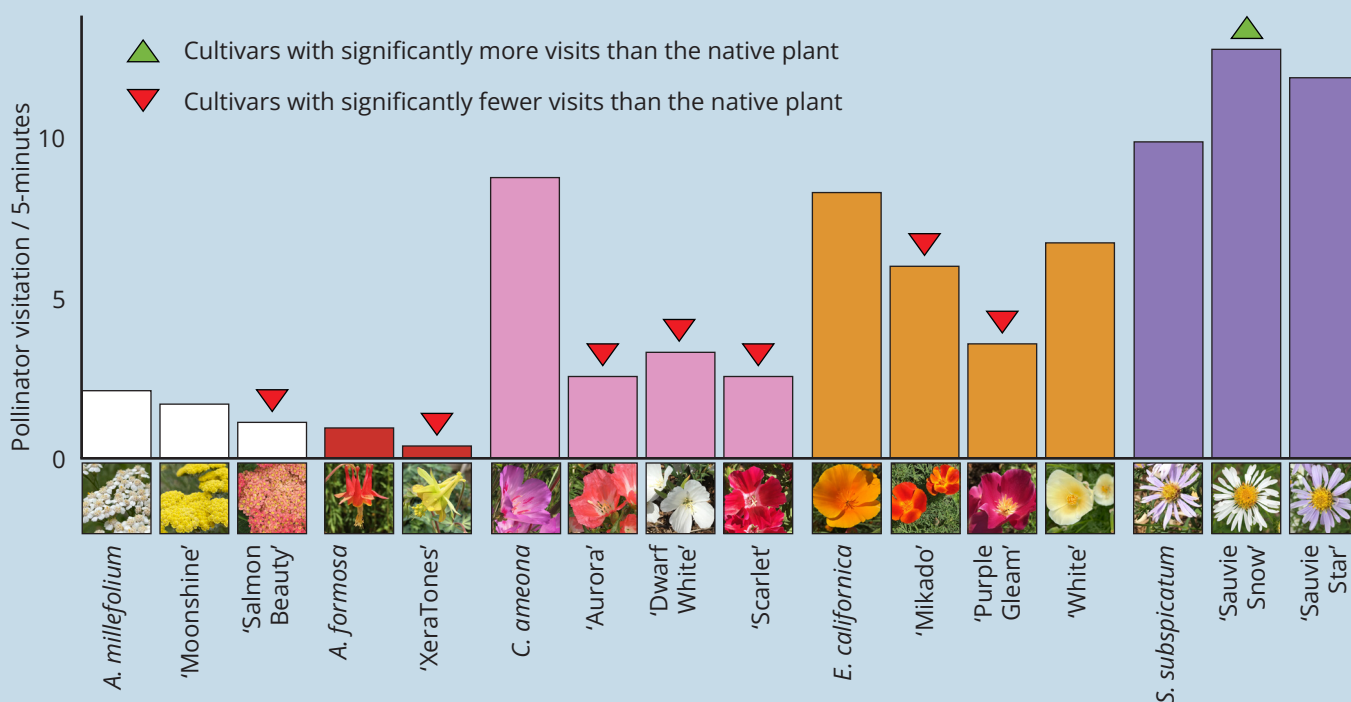
What we found

Italic name = wild-type native
 'Name in quotes' = cultivar

Pollinator richness (# of species)

Yarrow			Columbine		Farewell-to-Spring				California Poppy				Douglas' Aster		
21	15	14	9	3	32	17	23	9	31	19	16	21	29	29	25
<i>Achillea millefolium</i>	'Moonshine'	'Salmon Beauty'	<i>Aquilegia formosa</i>	'XeraTones'	<i>Clarkia ameona</i>	'Aurora'	'Dwarf White'	'Scarlet'	<i>Eschscholzia californica</i>	'Mikado'	'Purple Gleam'	'White'	<i>Symphotrichum subspicatum</i>	'Sauvie Snow'	'Sauvie Star'

Pollinator visitation





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In general, we found that pollinators visited native plants more frequently than cultivars. We also found that species richness (the number of pollinator species) was higher on native plants than cultivars. Plants in the Douglas' aster group are an exception to this trend, where 'Sauvie Snow' tied with the native in richness, and had a significantly greater visitation rate than the native. The Douglas' aster cultivars were selected from a local population of *Symphotrichum subspicatum*, rather than bred for ornamental traits, and may be more similar to the native species relative to cultivars in other plant groups.

How does this relate to your garden?

Our research suggests that we cannot assume that native cultivars are equivalent substitutes for native plants in pollinator gardens. When adding plants to gardens for pollinators, we recommend sourcing wild-type native plant species or minimally developed cultivars over highly developed cultivars (e.g., hybrids and plants with significantly different phenotypes) to promote the greatest abundance and richness of pollinator species. Cultivars can provide aesthetic value but may not be as attractive to pollinators as wild-type native plants.

To find native plants, look for plant tags without cultivar names following a scientific name (e.g., *Clarkia amoena* rather than *Clarkia amoena* 'Aurora'). Local plant nurseries that specialize in native plants often have few to no cultivars in their inventory, and may be the best source for regionally appropriate plant species.

Additional Information

- Hayes J., Bell N., Best L., et al. 2025. Pacific Northwest native plants and native cultivars Part I: Pollinator visitation. *Environmental Entomology*. 54(1):199–214. <https://doi.org/10.1093/ee/nvae126>.
- Hayes J., Garden Ecology Lab. 2023. How to buy a native plant. Corvallis, OR: Oregon State University Extension Service. <https://ir.library.oregonstate.edu/concern/defaults/rf55zh83j>.
- For more Garden Ecology Lab Briefs, visit the "For Gardeners" page from gardenecology.oregonstate.edu.

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- Contact your local extension office for Master Gardener advice, or look for Master Gardeners at local farmers' markets.
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