Can native cultivars be a useful resource for pollinators?

Questions about the utility of native plant cultivars have been raised alongside growing interest in pollinator-focused gardening. **Cultivars are often bred for particular plant traits, including growth habit, disease resistance, petal or foliage color, and beyond.** This can impact the floral rewards that pollinators seek, including pollen and nectar availability. Recent research has examined the utility of wild-type native plants and their respective cultivars. **Explore important definitions, current cultivar research, and examples of wild-type native plants and their respective cultivars.**

Achillea x 'Moonshine', a hybrid cultivar of yarrow. Photo by Nicole Bell.

At a glance:

- Some native plant cultivars have reduced floral rewards and overall utility to pollinators.
- Some cultivars are visited just as frequently, or more frequently, than the native type.
- Pollinator-focused habitat should emphasize wild-type native plants to best support diverse insect communities and support native plant and animal conservation.

Helpful Definitions

Native plant

Defined in restoration ecology as a **plant naturally found in a specific region prior to European settlement.** Native plant status is tied to a particular geographic scale, such as native to North America, native to Massachusetts, native to the Connecticut River Valley, etc.

***Achillea millefolium*: Common Yarrow**

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* 'Balvinviolet' has a different petal color than the native type.

***Achillea millefolium* 'Balvinviolet'**

Hybrid cultivar

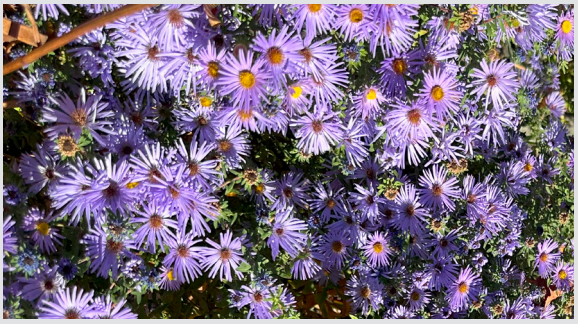
Hybrids are **plants with parents from 2+ different species or genera.** Like cultivars, hybrid cultivars have a name listed in single quotation marks, but they typically only have the genus listed before the cultivar name. Some hybrid cultivars have an 'x' in their name, between the genus and cultivar name.

***Achillea* x 'Moonshine'**

Considerations and Examples

The inflorescence of some cultivars is very different than the wild type. This *Hydrangea quercifolia* 'Snow Queen' has been selected for an abundace of large, sterile flowers compared to the wild-type oakleaf hydrangea. This greatly reduces its utility and resource offerings for pollinators. This is common in cultivars derived from our native hydrangea, such as *H. arborescens* 'Annabelle'.

Cultivars with double flowers are often a signal of sterility or greatly reduced floral rewards, and make any existing rewards difficult for pollinators to access. *Rosa* 'Ispahan' is an ornamental rose, but it is not an adequate pollinator plant or substitution for native roses in Massachusetts. Many pollinators in the state depend on less showy roses, such as *Rosa carolina* and *Rosa virginiana*, though there are many native plants in the rose family to choose from.



Minimally altered cultivars, or those selected from natural variations in the wild, are typically the best cultivar selections for pollinator support. New England aster, *Symphyotrichum novae-angliae*, supports diverse pollinator visitors in the fall. Research indicates that cultivars of this plant are often as attractive, and sometimes more attractive, to insect visitors than the wild-type.

Important Conclusions:

- **Consider the goals of the habitat.** In conservation areas, wild-type natives should be selected. In home gardens or other pollinator habitats, cultivars can be an appropriate choice.
- **Cultivars fall on a broad spectrum**, where some are sterile, and others offer abundant resources to pollinators. This influences their attractiveness to insects.
- **The utility of native cultivars can vary significantly**, and thus they are best evaluated on a case-by-case basis.
- **If provisioning habitat for pollinators is the goal, emphasize wild-type native plants.** Cultivars may still be selected in some cases due to drought tolerance, disease resistance, growth habit, cultural importance, food production, or aesthetics.

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Thank you to the Oregon State University Garden Ecology Lab for collaborating on this factsheet, including providing native plant definitions.

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