

Wild Ones Statement on the Use of Nativars

In the fall 2012 the National Board of Directors established a committee to develop a position for Wild Ones on the use of nativars. The resultant statement was adopted in 2013. This position statement was revised and updated by the Wild Ones Executive Committee in 2021, with input from Honorary Directors, and approval by the Board.

Nativars: Where do they fit in?

Wild Ones encourages the use of native plants to promote biodiversity and ecosystem health in gardens and landscapes. Do nativars, which are cultivars of native plants, have the same ecological value as straight-species plants? What is the difference between a nativar and a straight-species native?

A *native plant* is one belonging to a species that was present in a region, habitat, or ecosystem prior to European settlement. These plants have held an ecological niche in our landscape for centuries and reproduce, primarily, through open pollination. These plants are sometimes referred to as straight-species or wild-type natives.

A *cultivar* is any plant that is developed or selected for its desirable characteristics and maintained by propagation. Cultivars are reproduced through cloning methods such as grafting, cutting, root divisions, layering, tissue culture, etc.

A *nativar* is a cultivar that came from a straight-species NATIVE plant. Nativars are propagated for many reasons: flower colors or forms, compact size, insect or disease resistance, tolerance of certain environmental conditions, and more. Nativars can be a native plant that is a genetic variant found in nature that is then selected and propagated to retain a particular or unique aspect. They can also be obtained through the process of artificial selection in which plant breeders grow plants with desirable characteristics and eliminate those with less desirable characteristics.

How do you know if you have a nativar or a straight species plant?

Nativars can be identified by checking for a variety name, in addition to the species name, which is given on a tag or catalog. For example, Brandywine red maple, *Acer rubrum* 'Brandywine', is a cultivar, whereas the native, from which it is derived, would simply be labeled as Red Maple, *Acer rubrum*.

The desire for a novel or improved plant product, particularly one that is easy to replicate, grow, and market is understandable, yet these plants may not provide the same ecological return that comes from a straight-species native. One way in which these plants



Native New England aster, Photo credit: Becky Erickson

Nativar of New England aster, Photo credit: Janet Allen





are more limited is in their lack of genetic diversity; another limitation may be in their delivery of ecosystem services.

Genetic Biodiversity

Native plants grown from seed carry the wealth of their native gene pool. They perpetuate this diversity as they grow and participate in successful pollination. This genetic diversity helps whole species to survive and adapt when confronted by environmental stress. Each successive generation of plants reproducing in this manner continues to maintain a rich heritage.

Most cultivars, including nativars, are propagated by cloning, so that each plant has the same genetic makeup as the parent plant, and so on. A cloned cultivar has a set genetic package. Sometimes these clones go on to participate in the natural reproductive cycle by cross-pollinating with other true natives, sometimes they do not.

If only a small percentage of the plants being planted in gardens and landscapes are nativars there would be no concern. However, the mass-production, and increased use of nativars over straight species native plants is a concern for ecologists, environmentally friendly gardeners, horticulturists, and native plant professionals. Straight species open-pollinated plants, and the genetic diversity they contain, are the foundation of both nature and horticulture. They are the building blocks of future horticultural selections as well as the key to ecological preservation.

Ecosystem Service

Do nativars serve the same ecological function in the landscape with the same degree of effectiveness as

straight-species plants? Research on this topic is ongoing, and there is much yet to be discovered about the differences between specific nativars and straight species in regards to their particular usefulness to pollinators, as well as their ability to provide other ecological services, such as food sources for insects.

Annie White, at the University of Vermont, in her dissertation, *From Nursery to Nature: Evaluating Native Herbaceous Flowering Plants Versus Native Cultivars for Pollinator Habitat Restoration*, 2016, found that when particular nativars varied significantly in color, size, or shape from their wild-type, they provided less ecological service to pollinators. Her research recognized that

'native wild vs. native cultivar' studies need to be conducted to better understand how different cultivar species may or may not be an equal replacement for their native type.

In addition to the research cited above, native plants are an essential component of complex functioning food webs. For

example, in the study by D.L. Narango, D.W. Tallamy, and P.P. Marra, *Nonnative Plants Reduce Population Growth of an Insectivorous Bird*, 2018, found that chickadees foraged 86% of the time on native plants. Chickadees achieved successful replication rates ONLY in yards with less than 30% introduced woody plants. This study, and others, underlines the importance of landscapes with at least 70% native plants for optimal ecological stability.

Request natives when you buy

As advised by Dr. Douglas Tallamy, Wild Ones Honorary Director, University of Delaware entomologist and author of *Bringing Nature Home: How You Can Sustain Wildlife with Native Plants*, "It is a bad idea to load the landscape with cultivars that have no genetic

"When we try to pick out anything by itself, we find it hitched to everything else in the Universe."

-John Muir

variability... I think the safest policy right now is to encourage the use of straight species. Ask for them at your local nursery; encourage nurserymen to start stocking more straight species. The nursery industry has not embraced the message that native plants are more about ecosystem function than about looks. We have to convince them that there is a market for plants with high function.”

Difficulties may occur when native plants are not readily available or when they are labeled as natives and they are not. Seek out native plant nurseries in your eco-region and ask for straight-species natives from your landscape sources. Planting wild-type natives, not nativars, is particularly important when preparing a natural restoration or habitat.



Rudbeckia hirta
nativar 'Cherry Brandy,'
Photo credit: Cliff
Orstead



Native black-eyed
Susan, *Rudbeckia*
hirta, Photo credit:
Lisa Olsen

While a nativar will most likely be a better ecological fit for North American gardens than an exotic species from Asia or Europe, it remains to be seen to what extent it can fill the ecological niche and provide the genetic richness of a native plant. It is the mission of the Wild Ones organization to promote environmentally sound landscaping practices to preserve biodiversity, through the preservation, restoration and establishment of native plant communities.

Short-list of references for revised nativar statement:

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