



## Promoting the stewardship and conservation of Georgia's native plants and their habitats

As the increase in usage of native plants continues, cultivars of them have increased as well. Some members have asked about using them and fortunately there is more research than ever about their ability to support our native pollinators and wildlife. The GNPS Board of Directors recently crafted the following statement about using them. It includes some background information to set the context for it. Following the statement are some resource links to provide some of the research regarding cultivars.

### **What is a cultivar?**

A cultivar (short for cultivated variety) is a selection of a plant that has been patented and propagated through cultivation, most often through cuttings, division, or tissue culture and sometimes selected seeds usually through controlled pollination of the parent plant. In order to preserve the traits for which they were selected, most cultivars are clones of the original plant. For native plants, some people refer to these as 'nativars' but they are the same concept as the broader term 'cultivar.' Cultivars can be hybrids or they can be selections of the species found in a population of plants. For comparison, the term 'straight species' refers to the plant as originally found in the wild.

### **Why are they created?**

Nurseries and breeders select plants for cultivars because of a desirable trait such as: a more compact size; a particular flower color; more blooms per plant; double blooms; larger blooms; disease resistance; unusual leaf color; larger fruit; etc. The selected plant might have been deliberately bred in a nursery or selected from a wild population.

### **How do you recognize that a plant is a cultivar?**

Proper labeling on the plant helps you recognize a cultivar. Straight species plants have the scientific name such as *Phlox paniculata* while cultivars have a name in single quotes that follow: *Phlox paniculata* 'David'; a hybrid cultivar should include an 'x' in the name to denote that two species were crossed: *Phlox* x 'Wanda.' Once you identify that a plant is a cultivar, search engines (such as Google and Bing) can help you research the plant to understand why it was selected and/or the species used to create it (if it is a hybrid). Further use of the word 'cultivar' here applies equally to hybrid and non-hybrid cultivars of native plants.

## **Are they appropriate for use?**

Cultivars can have a place in *designed landscapes/gardens* when selected carefully and used in conjunction with straight species plants. For example, cultivars selected for compact form allow smaller gardens to use plants that might have been too large for the space. When choosing to use a cultivar, it is important to understand the traits of the plant and how those match the goal of the garden. For example, plants bred for double blooms are less productive for pollinators and would not be a good choice for a pollinator garden.

Cultivars should not be used in Georgia restoration projects/areas. Straight species, preferably sourced from regional Georgia populations, should be used.

## **What are some of the concerns with using them?**

The concerns are two-fold: loss of genetic diversity and reduced ecosystem services that plants normally provide. Since cultivars are clones, using them exclusively reduces the genetic diversity of the species, diminishing the biological heritage of the species and opening the potential for biological decline of it.

To fully appreciate how a cultivar can reduce a plant's benefit to the ecosystem requires a bit of research about the cultivar. Scientific research by Doug Tallamy and Annie White have helped us understand two areas of alteration that affect a plant's ability to provide ecosystem services to native insects: 1) forms that alter the leaf color (particularly dark colors are less attractive to insect herbivores like caterpillars); and 2) forms with double blooms provide less nectar and pollen to pollinators while the research on flower color form continues.

We recognize that while we have better information than before on how insects interact with native cultivars, the research on them will continue and will likely improve our understanding even further in the future.

## **Our statement about using them:**

The Georgia Native Plant Society recognizes that balanced use of some native cultivars in designed landscapes can provide specific functionality (e.g., compact size) and landscape beauty to showcase native plants and still support wildlife. We do not recommend that cultivars be used in Georgia restoration projects. Restoration projects should only use straight species plants that are as locally sourced as possible, preferably from seeds or plants in the same ecoregion.

When used in designed landscapes, cultivars require some additional considerations. We recommend that straight species of plants also be included in designs when cultivars are used. For example, when using butterfly milkweed *Asclepias tuberosa* 'Hello Yellow,' one should also include the straight species *Asclepias tuberosa*. If observation in the garden later finds that insects are less attracted to the cultivar, consider removing it in the future and replacing it with straight species. We recommend a healthy balance of straight species and cultivars when cultivars are chosen in the design.

We encourage people to ask for straight species plants in nurseries to encourage more nurseries to grow or stock more genetically diverse plants. When you purchase these plants from nurseries, particularly small nurseries that grow plants from local seed, you encourage the propagation of them and the preservation of biodiversity.

**Resources:**

Baisden, Emily C., Tally, Douglas W., Narango, Desiree L., Boyle, Eileen. 2018. "[Do Cultivars of Native Plants Support Insect Herbivores?](#)" American Society for Horticultural Science

Marinelli, Janet. 2016. "[Native, or Not So Much](#)", National Wildlife Federation

Rodomsky-Bish, Becca. 2018. "[Nativars \(Native Cultivars\): What We Know & Recommend](#)", Habitat Network/ The Nature Conservancy/The Cornell Lab

White, Annie. 2016. "[Nursery to Nature: Evaluating Native Herbaceous Flowering Plants Versus Native Cultivars for Pollinator Habitat Restoration](#)" University of Vermont

White, Annie, 2020. "[How Native Plant Cultivars Affect Pollinators](#)", Metro Hort Group

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*This statement can be found on the GNPS Education menu, under the GNPS Policy tab. Please use the link to that statement when referencing it. Direct link:*

<https://gnps.org/education/gnps-statement-on-cultivars-of-native-plants/>