Friends of Hilltop Arboretum Native Plant Designation: Definitions, Methodology, and Procedure

Marcia Hardy, Jenneke Visser, and Virginia Gardner

LSU's Hilltop Arboretum has a long-standing interest in the native plants of Louisiana, beginning with native plantings by founder Emory Smith and continuing with the installation of a native prairie meadow, educational programs and sale of native plants. The purpose of this document is to provide the definitions and methodology used by Hilltop in designating plants offered for sale as native to Louisiana on plant labels and signs. Each individual plant is sold with an identifying label, while signs are located with each grouping of the same species and provide photographs and information on the species' preferred growing conditions.

No single definitive source on native plants exists. The field is constantly changing as are scientific names and ranges. Common names are inconsistent and may refer to one or more plants. Louisiana has about 2,500 native plants. Distinguishing between native and nonnative plants is critical as the introduction of non-native organisms into new areas may significantly change natural communities which may have negative consequences to native plants, wildlife, and the environment.¹

Definitions. This document uses the definitions (below) given in the 2021 Louisiana Wildlife and Fisheries pamphlet for native, non-native, invasive, aggressive, and naturalized plants.²

"NATIVE PLANT: A species present in the same area in which it evolved.

NON-NATIVE PLANT: A species brought by human action to an area outside its natural (i.e., native) range. Such introductions can occur accidentally or intentionally.³

INVASIVE PLANT: A non-native species that causes significant negative impacts to native species or the environment.⁴

AGGRESSIVE PLANT: Native species typically adapted to disturbed sites, where they establish and quickly spread. Aggressive plants often give way to other native plants within a few years. The impacts of aggressive plants are, therefore, more temporary than those of invasive plans.

¹ Louisiana Native Plant Resource Guide for Gardeners & Landscapers. Pamphlet Version 0.01, 05-2021. Brian Early, Managing Editor, Botanist, Wild life Diversity Program. Louisiana Department of Wildlife & Fisheries.

² IBID.

³ A nonnative plant is identified by "Introduced" on plant labels and signs when offered for sale at Hilltop.

⁴ Hilltop Arboretum will not knowingly offer invasive plants, as defined here, for sale.

NATURALIZED PLANT: Non-native plants that have escaped cultivation. The term "naturalized" mistakenly implies that the escaped plant has become part of the "native" flora. Therefore, due to the potential confusion with the term "native", the use of "naturalized" should be avoided."

Methodology. With respect to Hilltop's sale of plants, our focus is on plants native to Louisiana and more broadly the Southeastern US. We also sell a variety of introduced plants that are well adapted to our local environment. The resources cited in this document to determine native status use political boundaries, therefore we use the Louisiana state boundary to determine if a species is a Louisiana native. Native Louisiana plants are designated on their labels as "Status: LA Native". (It is worthwhile noting that a Louisiana-native plant may also be native to other Southeastern US states (and most often are) and other regions in the US.) We also may offer plants native to other Southeastern US states that have not been documented as native to Louisiana. On the label species native to the US, but not Louisiana is indicated as "Status: Native US". All plants not native to the US are labelled as "Status: Introduced". Plant signs will follow the same status classes as the labels. The resources listed in this document can be consulted to determine a plant's distribution as desired.

Native Louisiana plants, as defined in this document, are often offered for commercial sale as cultivars. These plants have been altered by human intervention or selected from natural populations for shape, color, size, etc.⁵ The effect of these changes on the natural systems that use the original native plant are frequently unknown and may be inconsequential, of benefit, detrimental or some combination. Cultivars of plants native to Louisiana and offered for sale at Hilltop are indicated on plant labels and signs as "Status: LA Native Cultivar". Cultivars of plants native to the US and offered for sale at Hilltop are indicated on plant labels and signs as "Status: Native US Cultivar" (Table 1). Some plants are hybrids between native and introduced species, these are indicated on plant labels and signs as "Status: Undetermined".

-

⁵ Louisiana Native Plant Society. 2024. Cultivars vs Species (http://lnps.org).

Table 1. Classification of plants offered for sale at Hilltop.

Status	Description
LA Native	Species native to Louisiana
LA Native Cultivar	Louisiana plant species bred or selected for improved shape, color,
	size, etc.
Native US	Plant native to the US, but not documented as native in Louisiana
Native US Cultivar	US plant species bred or selected for improved shape, color, size, etc.
Introduced	Plant not native to the US
Undetermined	Hybrids between native and introduced plants

Taking the above into consideration, multiple sources are used in determining a sale plant's status. Primary sources used for this are USDA Plants Database⁶, University of Texas at Austin Lady Bird Johnson Wildflower Center⁷, and the LSU School of Renewable Natural Resources (RNR) Louisiana Plant Identification and Interactive Ecosystem Virtual Tours⁸. Additional sources may be consulted as needed.

Procedure.

- 1. For plants procured from vendors or donations, after checking the spelling enter the scientific name (preferred) or common name provided by the vendor in the USDA Plants Database to confirm correct scientific name for native species. Correct scientific name for introduced plants is verified with the Integrated Taxonomic Information Service (https://www.itis.gov/servlet/SingleRpt/SingleRpt) or the Catalogue of Life (https://www.catalogueoflife.org/data/browse).
- 2. If designated as Native, review map to determine if native in Louisiana. Confirm USDA result via the Lady Bird Johnson Wildflower Center (see each plant's section listing states where native and/or restrict site search to "Louisiana"), and as needed, the LSU RNR database. The latter is particularly useful for Louisiana trees and shrubs.
- 3. Additional resources:
 - a. United States Geological Survey. Guide to the Plants of Louisiana. PlantID">https://warcapps.usgs.gov>PlantID. Searchable by scientific, common name or plant characteristic. Includes map showing known parish occurrence for each plant.
 - b. E Lee-Mader et al. 2016. *100 Plants to Feed the Bees*. The Xerces Society for Invertebrate Conservation. Storey Publishing, North Adams, MA. See each plant's map for native range.
 - c. J Miller and K Miller. 2005. Forest Plants of the Southeast and Their Wildlife Uses. Revised Edition. University of Georgia Press, Athens, GA. See each plant's "Range" section for native status and range.

⁶ USDA, NRC. 2024. The PLANTS Database (http://plants.usda.gov, 01/08/2024). National Plant Data Team, Greensboro, N.C. USA.

⁷ Lady Bird Johnson Wildflower Center. University of Texas at Austin. https://www.wildflower.org.

⁸ C. Reid. Louisiana Plant Identification and Interactive Ecosystem Virtual Tours. LSU School of Renewable Natural Resources. http://www.rnr.lsu.edu.plantid.

- d. S Wasowski and A Wasowski. 2020. Revised Edition. *Gardening with Native Plants of the South*. Lyons Press, Guilford, CT. See "Native Range" section for each plant. Good for up-to-date scientific names. Includes trees, shrubs, vines, groundcovers, ferns flowers, grasses and sedges, water plants.
- e. The Missouri Botanical Garden's website includes numerous native plant cultivars (http://www.missouribotanicalgarden.org/plantfinder/plantfindersearch.aspx).
- f. The website http://www.wilflowersearch.org/ is useful for identification of donated plants offered for sale. Its search criteria can be restricted to Louisiana (recommended) and are based on plant type and characteristics rather than name.
- 4. After verifying a plant's status, enter the appropriate designation on the labels and plant signs.
- 5. Before each public sale, verify the latest revision of each resource is in use for the plants in the sale.