Drought-Tolerant, Low-maintenance Plants for Southern 'Florida Yards' and 'Florida Landscapes'

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Abstract. 'Florida Yards' are privately-owned residential properties that adhere to the nine 'Florida-friendly' landscaping principles of the University of Florida's Florida Yards & Neighborhoods (FYN) program. Similarly, 'Florida Landscapes' are public landscaped areas that follow FYN principles. We have developed a list of over 350 native and non-native drought-tolerant, low maintenance plant species in the following categories: perennials; annuals and bedding plants; shrubs; flowering and shade trees; fruit trees; palms, cycads and palm-like plants; ornamental grasses; groundcovers; vines; epiphytes; and herbs and vegetables. All plants on this list fulfill the requirements of the FYN program and, therefore, are hereafter considered recommended plants for 'Florida Yards' and 'Florida Landscapes' in southern Florida. This list was developed for homeowners, garden groups, local government personnel, and other stakeholder groups in southern Florida participating in the FYN program.

The University of Florida (UF) has developed, and is promoting statewide, an educational outreach program called Florida Yards & Neighborhoods (FYN). This program is supported by the Florida Department of Environmental Protection, the U.S. Environmental Protection Agency, all five Florida Water Management Districts, various National Estuarine Programs, County Extension offices, and local governments, agencies, organizations, and individuals. The primary goal of FYN is to teach various stakeholder groups how they can reduce non-point source pollution originating from urban yards and public landscapes, while also conserving water and saving time, energy, and maintenance costs.

This plant list was developed in response to repeated requests from two important stakeholder groups in Miami-Dade County—homeowners and local government personnel. Each time an FYN program has been presented, at least one person in the audience has requested a list of low-maintenance, drought-tolerant plant species suitable for southern Florida. Although UF has literally hundreds of Extension publications available on its website—which is located at http://edis.ifas.ufl.edu—a list of recommended drought-tolerant plants specifically targeting southern Florida did not exist.

Our intention was not to create a comprehensive list of every possible low-maintenance, drought-tolerant plant species suitable—or available—for southern 'Florida Yards' or 'Florida Landscapes'. Rather, we began this list with the intention of presenting an assortment of options for a variety of conditions and a diversity of yard and landscape types. We were surprised to discover just how many plants fit our criteria of being able to tolerate drought conditions and having low maintenance requirements. In the end, we compiled an impressive list of over 350 plant species. For each plant listed, we have attempted to provide its common name, scientific name, maximum size, growth rate, light preference, salt tolerance, and any additional informative characteristics.

Criteria

This section will describe the criteria by which we chose plants for our list. We should first note, however, that even the most drought-tolerant plants require watering during their establishment period. Although this period varies among species, some general rules for container-grown plants are as follows:

- 1-gallon plant: 6 month
- 3-gallon plant: 1 year
- Trees: 6-12 months per inch of trunk diameter

By 'drought-tolerant', we mean that the plant will survive extended periods without rain or supplemental irrigation, while remaining healthy and retaining an acceptable appearance. Although 'acceptable' is, of course, a relative term, the FYN program encourages a more tolerant approach to landscaping.

'Low-maintenance', then, refers to a plant that does not require frequent maintenance—such as pruning or spraying—to look acceptable. Essentially, a low-maintenance plant has low or no fertilizer requirements and few pest and disease problems.

All plants on this list are either widely adaptable to varying soil types or are compatible with the poor sandy or limestone-based soils of southern Florida. As such, these plants will usually tolerate alkaline pH conditions.

The final criterion for this list was that the plants are not considered to be invasive by the Florida Exotic Pest Plant Council (FLEPPC, 2001), or restricted by federal, state, or local law (Burks, 2000). A few plant species on this list are restricted by Miami-Dade County from being planted within 500 feet of the native habitats they are known to invade; a caution statement is provided for these plants (Miami-Dade County, 1996).

We felt it necessary to include both native and non-native species to eliminate bias. We understand that southern Florida native plants are highly adapted for southern Florida conditions. However, landscape situations rarely imitate natural ecosystems. For example, some native plants will not tolerate compacted fill. Therefore, only adaptable native species are included. Native plants are indicated with ▲. Some of the plants listed also tolerate wet soil conditions, or even short periods of flooding, and yet, still have a high tolerance to drought conditions; these are indicated with ⭐.

Finally, we should mention that all species on this list may not be readily available at garden centers or nurseries. We have intentionally included species that are not common in the nursery trade in southern Florida with the hope that increased demand will generate increased supply. Plants commonly available in southern Florida are designated with ♦.
Categories

Plant were evaluated according to their function or role in yards or landscapes, and were then assigned to the following categories: A. Perennials; B. Annuals & Bedding Plants; C. Shrubs & Hedges; D. Flowering & Shade Trees; E. Fruit Trees; F. Palms, Cycads & Palm-like Plants; G. Ornamental Grasses; H. Groundcovers; I. Vines; J. Epiphytes; K. Herbs & Vegetables. Many of the plants have multiple uses (i.e., they may be used as a shrub or small tree), in which case they are listed in multiple categories. A definition and brief discussion of each category follows.

A. Perennials. To be considered a perennial, a plant must live for three or more years. The term as it is used in botany includes shrubs and trees, as well as groundcovers, vines, and herbaceous flowering plants. However, in horticulture, perennials are primarily plants that do not produce permanent woody stems. We have chosen to follow the horticultural definition of the term for this list. 38 perennials are listed.

B. Annuals & Bedding Plants. An annual is a plant that lives for fewer than one year up to two years, or is commonly treated as such in yards or landscapes. Bedding plants are usually low growing and are suitable for mass plantings intended to create a dramatic display of flowers or foliage. Although most annuals and bedding plants require moist soil, a few are drought tolerant. In southern Florida, most of them are cultivated in southern Florida. In a few cases, entire palm genera are considered tolerant of drought conditions; these include the following: Brahea, Coccothrinax, Copernicia, Livistona, Phoenix, Sabal, Thrinax, and Washingtonia. 44 palm species are listed.

Cycads are cone-bearing evergreen plants of the Division Cycadophyta. ‘Gymnosperm’ is a Latin word meaning ‘naked seed’ and refers to the manner in which the seeds of these plants are borne in cones rather than flowers. Often mistakenly referred to as palms, cycads are actually more closely related to pine trees than they are to palm ‘trees’. In fact, three of the four most common cycads in southern Florida are commonly referred to as palms: king sago ‘palm’ (Cycas revoluta), queen sago ‘palm’ (Cycas rumphii), and cardboard ‘palm’ (Zamia maritima). Of these, only the cardboard ‘palm’ is considered a low-maintenance plant. This is because sago ‘palms’ (and the genus Cycas in general) are highly susceptible to the aulacaspis scale insect (Aulacaspis yasumatsui; also known as the ‘Thai scale’ or ‘snow scale’) and require a routine spray program to maintain a healthy appearance. The cycads on this list are resistant to this serious insect pest. In fact, at least three species are designated as suitable replacements for king and queen sago. 20 cycad species are listed.

Palm-like plants are those that superficially resemble palms but belong to unrelated plant families. In addition to the cycads mentioned above, the following plants are com-
medicines, while vegetables refer to plants that produce edible parts (roots, stems, leaves, or fruit) and are grown for food. Although not included as standard components of most yards or landscapes, some herbs and vegetables have ornamental value. 7 herbs and vegetables are listed.

**Choosing & Purchasing Plants**

FYN teaches that putting the right plant in the right place is of foremost importance in creating a healthy and successful 'Florida Yard' or 'Florida Landscape'. However, this process is dependent upon each individual’s ability to choose and then purchase the 'right' plant species for a given location. But be forewarned that, in your pursuit for the 'right' plants, you may encounter common names that are misleading, or even multiple plant species with the same or similar common names. To alleviate this potential problem, we encourage people to primarily refer to scientific names when purchasing plants.

**Obtaining the List**

Because the plant list itself is 35 pages in length, it is much too long to include in the Proceedings of the FSHS. You may request a copy from Jody Haynes, FYN Program Extension Agent, UF/Miami-Dade County Extension, 18710 SW 288 St., Homestead, FL 33030; phone: 305-248-3311 X246; SC: 478-4778; FAX: 305-246-2932; e-mail: jlh@gnv.ifas.ufl.edu. Alternatively, you can download and print the list (in PDF format) from the FYN Publications page of the Miami-Dade County Extension website, located at the following URL: http://miamidade.ifas.ufl.edu/programs/fyn/fynpublications.htm. We have also developed a section of our website containing photos and more in-depth descriptions of the plants on this list.

The following references were used in developing the plant list, and can be accessed for more information.

**Literature Cited**


