

Arboreta Program Tree Species Guidelines

1) Nomenclature

- a) *What are the rules for writing the scientific name of a tree species (also called Latin names)?*
 - i) **Scientific names are always italicized.** For example, *Quercus rubra*. (You do not need to italicize family names.)
 - ii) The **genus name is always capitalized.** Such as, *Acer*, *Rosa*, or *Quercus*.
 - iii) The **specific epithet**, the part that comes after the genus name and that is unique to this species is **always in lower-case letters.** Examples: *americana*, *smithii*, or *novae-anglicae*. Do not change the ending of the words, the endings have only one correct ending.
- b) *Where can I look up correct spellings of species scientific names?* There are many published scientific names of plants but no global list of all correct and accepted scientific species names. Here are several resources to check spellings of names:
 - i) TUFC's Online Autofill Form: Undergoing constant revisions and updates. Can be found on TUFC's Arboreta Program webpage.
 - ii) International Plant Names Index (www.gbif.org/dataset/046bbc50-cae2-47ff-aa43-729fbf53f7c5): Very taxonomic, highly accurate. Does not say which names are currently used, but every published plant species is listed.
 - iii) The World Flora Online (worldfloraonline.org): An international initiative to achieve Target 1 of the Global Strategy for Plant Conservation and provides a global overview of the diversity of plant species. Very good and accurate for some families, still in the works for others. Tries to indicate if species names are accepted or if they are synonyms of other species.
 - iv) USDA -Plants Database (<https://plants.usda.gov>): Good for North American wild and naturalized plants. Some names are outdated, but otherwise great. Includes information (maps, synonyms, endangered species, etc.).
 - v) USDA - National Plant Germplasm System (www.ars-grin.gov/npgs): This database of worldwide economic plants and their names is good, but not complete.
 - vi) Wikipedia (www.wikipedia.org): Wikipedia has become a more reliable source of taxonomic information. Not all species are included, but there is often correct species (and family) information available there, as well as the correct spelling of Latin names of common plants.
 - vii) Publications: Tree identification books and publications are not all alike. Some are better than others. Here are some tips on finding the best ones.

- (1) *Who published it?* Documents published by credible sources (e.g., universities, natural resource agencies, professional organizations) says something about the quality of the information.
 - (2) *Who is/are the author(s)?* Look for author(s) with tree identification and nomenclature expertise, experience and credibility.
 - (3) *What do others say about it?* Check to see if other experts and users support and recommend its use, or if they are critical.
 - (4) *When was the publication printed?* The more recent, the better. Tree nomenclature can change.
- c) *What about cultivated trees?* The ***International Code of Nomenclature for Cultivated Plants (ICNCP)*** is a guide to the rules and regulations for naming cultivars, plants whose origin or selection is primarily due to intentional human activity. It is also known as **Cultivated Plant Code**.
- d) *Are there rules for writing a tree's common name?* There is no international or national authority on writing common names for plant species. The commonly accepted convention is all letters in lowercase except for capitalizing the first letter of the parts of a common name which are proper nouns (e.g., American elm, sugar maple, Japanese flowering cherry).

2) Tree Species Count

A tree with a distinct genus and species name will add one to the arboretum's tree count. Cultivars of the same genus and species can be part of the arboretum, but not count toward its tree total.

3) Tree Size

It is recommended that trees be a minimum of 1" caliper and that they display characteristic traits when inspected; however, if there is difficulty reaching this requirement there can be some leeway. Contact the TUFC for guidance.

4) Invasive Species

Invasive trees (as designated by the Tennessee Invasive Plant Council) shall not be included, accepted, or count in an applicant's tree list.