

Examples of Drought Tolerant Trees for NC Landscapes

Abies concolor (white fir) – Demonstrates better heat tolerance than most firs. In native range can survive in very thin, rocky soils. Best for the mountains.

Acer campestre (hedge maple) – Mountains and Piedmont probably best. Performed well in North Carolina Urban Tree Evaluation Program (NCUTEP), particularly the cultivar 'Evelyn'.

Carya spp. (hickory) – Hickories are found across the state. Availability is a problem, but hickories can be purchased from specialty nurseries and the NC Division of Forest Resources.

Chionanthus retusus (white fringetree) – Outstanding small flowering tree; one of the Top Ten Performers in NCUTEP. Should do well across the state.

Cladrastis kentukea (formerly *C. lutea*) - Breakage in ice storms may occasionally be a problem. Otherwise, one of the most desirable and ornamental of all native American shade trees. Not a good choice for the Coastal Plains.

Cornus mas (Corneliancherry dogwood) – The cultivar 'Spring Glow' was a Top Ten Performer in NCUTEP. Very tough. Mountains and Piedmont better suited than Coastal Plains. Yellow flowers in late winter.

Cotinus obovatus (American smoketree) – Small native tree; not suitable for Coastal Plains. Outstanding yellow or reddish purple fall color. Tolerates dry soil once established; avoid really difficult sites.

Diospyros virginiana (persimmon) – Large, tough native tree found across the state. Male cultivars (to avoid fruit) might be a good addition to our landscape mix.

Ginkgo biloba (ginkgo) – Native, according to the fossil record. Large tree with excellent yellow fall color. Suitable across the state. Also air pollution and pH adaptable.

Gymnocladus dioica (Kentucky coffeetree) – Will grow in Coastal Plains but perhaps better suited to Piedmont and Mountain regions. Tough, large tree with open habit and very large bipinnately compound leaves. Should be given more consideration as a landscape tree.

Ilex opaca (American holly) – Native holly across the state. Many holly species have excellent drought tolerance. In the Coastal Plains, can be found growing on sandy ridges underneath longleaf pine, in beech groves, in the maritime forest and scrub zone at the beach, and elsewhere.

Juniperus virginiana (eastern redcedar) – Among the toughest of the tough. Found across the state, including the hot sandy soils of the scrub zone at the

beach.

Lagerstroemia indica, *Lagerstroemia fauriei*, and various hybrids (crapemyrtle) – Does well in next-to-impossible sites along streets and in parking lots. Choose cultivars carefully for resistance to aphids, powdery mildew, etc.

Maackia amurensis (amur maackia) – Deserves a bit more attention. Has demonstrated good drought tolerance once established. Close relative of yellowwood, although fairly nondescript in comparison.

Magnolia grandiflora (Southern magnolia) – The old reliable. Few problems, very capable of surviving on rainfall alone. Best in Coastal Plains and Piedmont.

Pinus palustris (longleaf pine) – Sandy ridges in the Coastal Plains. Very attractive, large growing pine.

Pistacia chinensis (Chinese pistache) – Best in Zones 7 & 8; mid sized tree with excellent fall color and generally no problems. Has served well in tough spots in the New Bern area.

Quercus shumardii (Shumard oak) – Good fall color, apparently far more adaptable than pin oak. Drought and pH adaptable.

Quercus virginiana (live oak) – Best big tree of all for the Coastal Plains? Grows almost as close to the beach as eastern redcedar. Tremendous tolerance to high winds.

Sapindus drummondii (western soapberry) - “Variable” performance in NCUTEP, but worth a look. Native to central and south-central regions of the U.S. Very tolerant of dry soils.

Sassafras albidum (sassafras) – Why not? Great native tree that survives on its own once established. Can grow surprisingly large – perhaps 30-50 feet in height.

Sophora affinis (Eve's necklace) – Native to Oklahoma and Texas. Has exhibited a good tolerance of dry conditions. Small tree; deserves a closer look. Generally pest free.

Taxodium distichum (baldcypress) – Surprising degree of drought tolerance. Probably suitable over most of the state. Chlorosis can be a problem in high pH soils; knees may show up in surprising places, including dry slopes.

Ulmus parvifolia (lacebark elm; Chinese elm) – Excellent overall toughness has been observed. Attractive bark, foliage and form.

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