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ENH-581

Nyssa sylvatica: Black Tupelo[1]

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Introduction

Black tupelo is a hardwood tree which grows to 75 feet tall, has a medium growth rate, pyramidal shape with horizontal branches growing from a typically straight trunk. But the shape of the crown varies from tree to tree and, unfortunately, this is looked upon by some architects as undesirable. As the tree grows to 10 and 15-years-old, crown form becomes more uniform among trees. Lower branches droop with age and will need to be removed if used as a street tree. Growth habit is similar to pin oak, a tree which many people are familiar with. Providing a brilliant display of red to deep purple foliage in the fall, black tupelo surprises most people since it does not particularly stand out in the landscape until then. The small, blue fruits may be considered a litter nuisance in urban/suburban plantings but are quite popular with many birds and mammals, and they wash away quickly.

Figure 1. Full Form - *Nyssa sylvatica*: black tupelo
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General Information

Scientific name: *Nyssa sylvatica*
Pronunciation: NISS-uh sill-VAT-ih-kuh
Common name(s): black tupelo, blackgum, sourgum
Family: *Nyssaceae*
USDA hardiness zones: 4B through 9B (Figure 2)
Origin: native to the east half of the United States, extreme southern Ontario, and central and southern Mexico

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UF/IFAS Invasive Assessment Status: native
Uses: reclamation; specimen; street without sidewalk; shade; parking lot island 100-200 sq ft; parking lot island > 200 sq ft; sidewalk cutout (tree pit); tree lawn 4-6 feet wide; tree lawn > 6 ft wide; highway median

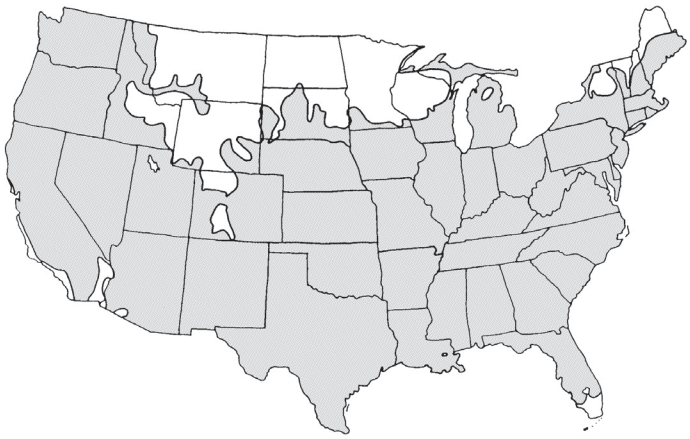

Figure 2.

Description

Height: 65 to 75 feet
Spread: 25 to 35 feet
Crown uniformity: symmetrical
Crown shape: pyramidal, oval
Crown density: moderate
Growth rate: slow
Texture: medium

Foliage

Leaf arrangement: alternate
Leaf type: simple
Leaf margin: entire
Leaf shape: elliptic (oval), oblong
Leaf venation: pinnate
Leaf type and persistence: deciduous

Figure 3. Leaf - *Nyssa sylvatica*: black tupelo
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Leaf blade length: 2 to 6 inches
Leaf color: dark green and shiny on top, paler green underneath; develops purplish spots
Fall color: orange, red, and deep purple
Fall characteristic: showy

Flower

Flower color: greenish yellow
Flower characteristics: not showy; emerges in clusters on a small stalk at leaf axils
Flowering: spring

Figure 4. Flower, Female - *Nyssa sylvatica*: black tupelo
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Figure 5. Flower, Male - *Nyssa sylvatica*: black tupelo
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Fruit

Fruit shape: oblong
Fruit length: ¼ to ½ inch
Fruit covering: fleshy drupe
Fruit color: blue-black
Fruit characteristics: attracts birds; not showy; fruit/leaves a litter problem
Fruiting: ripens in late summer and early fall

Trunk and Branches

Trunk/branches: branches droop; not showy; typically one trunk; no thorns
Bark: dark gray, brown, brown black; irregularly and shallowly furrowed; becoming blocky with age
Pruning requirement: little required
Breakage: resistant
Current year twig color: gray, brown
Current year twig thickness: thin, medium
Wood specific gravity: 0.50

Figure 6. Bark, Young - *Nyssa sylvatica*: black tupelo
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Culture

Light requirement: full sun to partial shade
Soil tolerances: clay; sand; loam; acidic; wet to well-drained
Drought tolerance: high
Aerosol salt tolerance: moderate

Figure 7. Bark, Mature - *Nyssa sylvatica*: black tupelo
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Other

Roots: not a problem
Winter interest: yes
Outstanding tree: yes
Ozone sensitivity: tolerant
Verticillium wilt susceptibility: susceptible
Pest resistance: free of serious pests and diseases

Use and Management

Black tupelo prefers a moist, slightly acid soil. Larger specimens may be difficult to transplant from deep, well-drained field soil because of its deep roots and should only be transplanted from the field in the spring. Therefore, it is usually seen growing in containers at the nursery. Little pruning is required to form a well-structured tree since the trunk stays straight and branches usually grow at wide angles with the trunk. Black tupelo makes a good street or parking lot tree for suburban neighborhoods, possibly for downtown areas. It should be used more often for this purpose but will benefit from occasional irrigation in droughts. Does amazingly well in wet, compacted soils typical of many urban areas with highly disturbed clay soil. It is also somewhat salt-tolerant for planting along the shore.

Black tupelo is rarely attacked by pests, and when it is they are rarely serious enough to warrant control.

Nyssa sylvatica var. *sylvatica* grows on moist sites; var. *aquatica* has a buttressed and swollen trunk base and grows in swamps. *Nyssa bicolor* is very similar and often confused with *Nyssa sylvatica.*

Pests

Scales, including Sourgum scale, can be controlled with horticultural oil.

Forest tent caterpillar can defoliate the tree in the spring. Unless defoliation is extensive in two or more successive years, control is not needed.

Diseases

Several fungi cause cankers on black tupelo. As the cankers enlarge the infected stems die back. Trunk cankers cause tree dieback. Prune out infected branches and keep trees healthy.

Leaf spots cause purplish blotches on the upper leaf surface. Rake up and destroy infected leaves in the fall to reduce the disease potential for the following year, if you wish.

Recently a large number of trees have been discovered dying in the mountains of North Carolina, Tennessee, Virginia, and Georgia. The causal agent is unknown but symptoms include leaf spots, branch cankers, leaves dying and hanging on the tree, and leaf blotches.

Reference

Koeser, A. K., Hasing, G., Friedman, M. H., and Irving, R. B. 2015. Trees: North & Central Florida. University of Florida Institute of Food and Agricultural Sciences.