

## Learning about Tupelo Gum *Nyssa aquatica*

Tupelo Gum (*Nyssa aquatica*), also known as the cottongum, sourgum, swamp tupelo, water tupelo, and water-gum tree, is a large, deciduous, water-loving tree that grows along the coastal and Mississippi floodplains. It can grow in very wet soils.

**Characteristics.** Tupelo Gum trees are large with swollen bases and highly furrowed bark. The Tupelo Gum's swollen, buttressed base provides stability in the moist soils and peats of swamps and low lying, or bottomland, forests. A mature tree can grow to be over 80 feet tall and be up to four feet in diameter. The elliptical leaves are alternate and taper to a point. The margins of the leaf are smooth or have only a few teeth. The leaves are 10 – 24 cm long and between 2 and 4 inches wide. The upper surface of the leaves is dark green in color and smooth, while the underside is a paler green and is covered with fine hairs. In the fall, the leaves turn an orange-red color. The Tupelo Gum's flowers are yellowish in color. Mature Tupelo Gum tree roots have special adaptations that enable them to live in saturated soils with little oxygen. The roots tend to be shallow and closer to the soil surface where the oxygen is. Their cortex has abundant intercellular spaces through which to transport oxygen to the roots from other parts of the tree. The thin, scaly bark is dark brown or gray.

**Fruit.** The fruit of the Tupelo Gum is greenish-brown and sometimes blue-black. The fleshy fruits ripen in September and are about an inch long. Each fruit contains a boney, ribbed stone. Stones range in color from white to dark brown or gray and some are pinkish white. The seeds will only germinate after the water recedes. The seedlings develop best in soils that are wet year round, and in moving, aerated water, not stagnant water. Tupelo Gum trees grow best in full sunlight, and mature trees are not tolerant of shade.

**Geographic Range.** It is native to the coastal plain from southeastern Virginia to southern Georgia, northwest Florida along the Gulf coast to Texas. Its range also extends up the Mississippi River to the tip of Illinois.

### Additional Information.

- Many kinds of wildlife like wood ducks, wild turkeys, squirrels deer, and raccoons eat the fruit of the Tupelo Gum, which is also a favorite honey tree.
- The Tupelo Gum is a member of the Dogwood Family.
- The Tupelo's generic name comes from Nyssa, one of the ancient Greek water nymphs, or goddesses, of lakes and rivers.
- The name "tupelo" is from Creek Indian words meaning "swamp tree".
- The spongy wood of the Tupelo's roots has been used as a substitute for cork in floats of fish nets.
- When cut down or damaged, Tupelo Gum sprouts easily from the stump.
- Burned bark mixed with water was used by Native Americans as a red dye known as Choctaw Dye.

### References:

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