

Sweetgum (*Liquidambar styraciflua*): Ancient Chewing Gum

by Gary Carlin

Sometimes the name of a plant tells us about what it produces. The genus name of *Liquidambar* is from the Latin for “fluid amber”. The sweetgum tree produces a fragrant gum resin or balsam (terebinthine juice) called “liquid amber” or “copalm balsam”. When a branch emerges from the stem, or a tree is wounded or its bark removed, the clear, yellow, or reddish gum somewhat similar to turpentine will appear.

The gum resin is said to have a fragrance that is similar to rubbing alcohol (or mature wax from a whale’s digestive system called *ambergris*). Regardless of what you call it or its color, it is gum and people did chew it as we chew *Juicy Fruit*, *Trident*, and *Double Bubble* today. Calling this gum “sweet” is a stretch – as it is bitter. However, if you compare the gum resin from Sweetgum to Black Gum (*Nyssa sylvatica*) it is far less bitter, thereby making it “sweet”! Sweetgums are aromatic and if you crush the leaves of the tree you will smell a lemon-mint scent. The gum resin was highly sought after for several medical applications. In order to extract the resin, the gum had to be removed from the tree, boiled and pressed. Overtime the gum resin significantly hardens and was shipped worldwide in wooden barrels.

In fact the gum resin was a favorite of the ancient Aztecs. They used it to make medicines and as a fragrance in perfumes and incense. When the Aztec conquered other territories they demanded that the people supply them with the gum resin. The Aztecs even flavored their tobacco with sweetgum resin. In diaries kept about the contact between the Spanish and Aztecs, there are passages describing *Hernan Cortez* experiencing the sweetgum flavored tobacco in in the Aztec capital *Tenochtitlan* with *Moctezuma* and his lords. Even today, the sweetgum is still used in perfumes, cosmetics and to flavor tobacco.

Unfortunately, for the sweetgum tree most people associate the tree with its round, spiky fruit (80-120 spikes per ball) that has 40-60 capules, each of which contains two very small, winged seeds. These fruits come from tiny, greenish flowers that have no petals, The seeds are a favorite food for numerous birds, squirrels, and chipmunks. Once the seeds are released the fruits (called “gumballs by children) begin to brown and begin to drop and collect under the tree, much to the dismay of homeowners, golf courses, and park goers. They are not so affectionately also called burr balls, “bommyknockers”, sticker balls, and “space bugs” – as you will find walking over them. However, people forced to deal with them use them as fire starters and to make rabbit barriers and spray paint them different colors to make various ornaments.

The sweetgum tree or “satin walnut” to carpenters, is also an important tree in the lumber industry. It is used to make veneers, plywood, furniture, moldings and trim, railroad ties, cigar boxes, crates, barrels, wood flooring, and cabinets. It is often dyed black to make an inexpensive substitute for ebony in items such as picture and mirror frames. While it can also be stained other colors to mimic a wide range of hardwood types. It is considered an “eco-friendly wood” since the trees grow quickly to replace themselves. Once cut, the roots of the tree can send forth up to forty new trees. It is no wonder the tree is a pioneer species in a forest that will help prepare the area for the future dominant species that come to characterize a climax community. Because of its fast growth and ability to grow almost anywhere, sweetgums have been used to make wind breaks for erosion control of soil.

The luna moth (*Actias luna*), the largest moth in the southeastern U.S., feeds vigorously on the sweetgum during the caterpillar stage of its life. And in an old southern rhyme, the owl who is associated with death is perched in a sweetgum tree.

“When you hear the screech owl, honey, in the sweetgum tree,
It's a sign as sure as you're born a death is bound to be;

Unless you put the shovel in the fire mighty quick,
For to conjure that old screech owl, take care the one that's sick.”