

SMA Selects the 2011 Urban Tree of the Year

Goldenraintree (*Koelreuteria paniculata*)

Photos by Steve Cothrel except where indicated



Koelreuteria paniculata in high bloom

Here, SMAers attest to the many fine qualities of the 2011 Urban Tree of the Year, goldenraintree (*Koelreuteria paniculata*).

I first became acquainted with goldenraintree (*Koelreuteria paniculata*) in southeastern Virginia where the species is commonly used as an ornamental tree in medians and landscapes. While goldenraintree has many attractive morphological features, it was the showy splendor of almost tropical-like yellow flower panicles that

caught my attention on that early summer day long after the flowering cherries, dogwoods, redbuds, and azaleas had lost their spring glory.

Over the years I observed many other interesting attributes that make this medium sized tree so unique and well suited for boulevards and tree lawns in USDA hardiness zones 4-8. I witnessed the paper thin yellow-green dehiscent capsules that take on a luminescent glow like a Chinese lantern as the late summer rays filter through the open crown.

There are many other reasons why SMA members selected *Koelreuteria paniculata* as the 2011 Tree

of the Year. The coarse branch structure and stout stems prominently display the deeply incised pinnately to bipinnately compound leaves which allow filtered light to penetrate the crown and pronounce season's end in golden-yellow hues.

Goldenraintree is very drought tolerant once established and well suited to urban soil conditions including pH extremes (4.5-8.0), coarse to fine texture, and compacted soils with low organic content and fertility. It is also reasonably free of insects and diseases and requires little pruning to maintain a uniform crown symmetry and safe branch structure. In youth, the tree is irregular in form and the species has a propensity to develop a very pronounced trunk sweep, so hand selection at nurseries is critical in selecting trees that are suitable for street use. While not inordinately susceptible to ice damage, the branch attachment on young stems is weak, rendering newly planted goldenraintrees prone to vandalism. I observed

this characteristic firsthand when my superintendent in Norfolk gently "leaned" on a lower scaffold limb on a 4-inch (10-cm) caliper park tree, separating the branch from its trunk collar.

The most widely available cultivar, 'September', displays hybrid-like attributes of goldenraintree's close relative, Chinese flame tree (*Koelreuteria bipinnata*), both of which flower in late summer (late August – early September). However, 'September' is reportedly less cold-hardy than the species (*K. paniculata*).

—David Sivy, Forestry Services Manager, Milwaukee, Wisconsin

On West State Street near Meadow Street and on many streets in Ithaca, you will now see the glorious yellow blooms of the goldenraintree. This small to medium-sized tree that hails from China, Japan, and Korea is one of the few trees that bloom in mid-summer.



New *Koelreuteria* pods



Goldenraintree foliage • Photo Courtesy Urban Horticulture Institute, Cornell University



Goldenrain tree fall color

We can thank Thomas Jefferson for introducing goldenrain tree to this country. Goldenrain tree had already made its way to Europe when Jefferson, while serving as Minister to France between 1784 and 1789, struck up a friendship with Madame de Tesse, aunt of the Marquis de Lafayette. He was an avid horticulturist and encouraged his friends to send him seeds.

It is recorded that on June 12, 1809, Jefferson received seeds of *Koelreuteria* from France and had a tree growing from them two years later at his home in Monticello, Virginia. Although it was reintroduced several times after that, we can thank Thomas Jefferson's love of plants for this very tough urban tree.

We now know that it is one of the most drought and heat tolerant trees and grows well all over the United States except where the winter temperature drops below -20 F (-29 C). It grows well in most soils except where drainage is poor. It is not a large tree, commonly reaching 20 feet (6 m) or, rarely, 40 feet (12 m) on a good site. In Ithaca, we grow it under utility wires with no problems

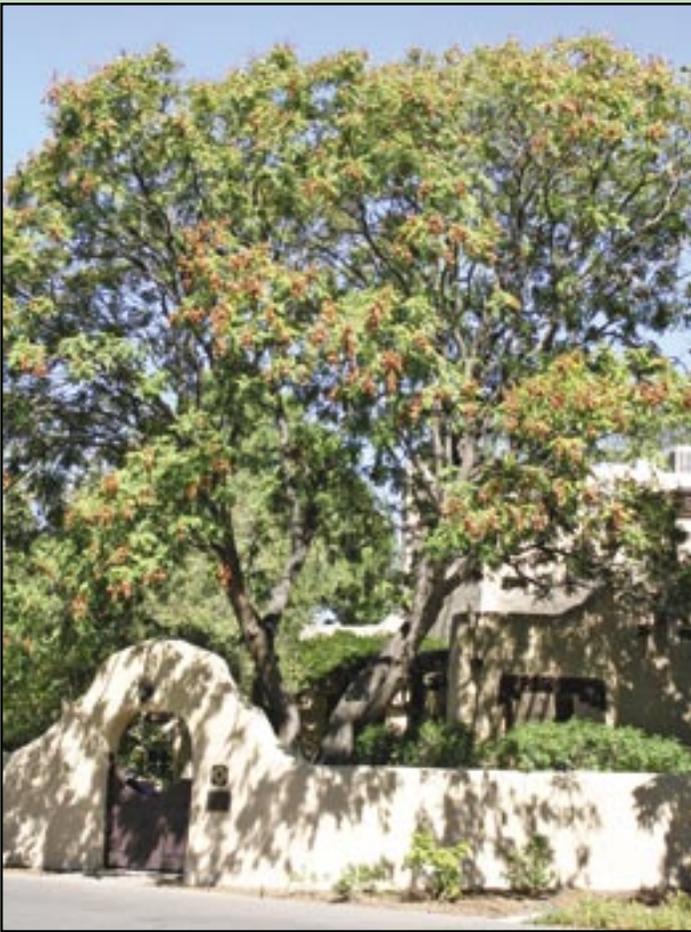
and have transplanted it successfully bare root at small (1.5 inch/38 mm) caliper.

In Ithaca, in addition to the common goldenrain tree, we have two variants, the cultivar 'September' and 'Rose Lantern.' Both these trees bloom later into the early fall and 'Rose Lantern's' seedpods are a beautiful pink color before they turn tan.

—Dr. Nina Bassuk, Director, Urban Horticulture Institute, Cornell University and Chair, Ithaca Shade Tree Advisory Committee

Koelreuteria paniculata has been an adaptable medium-sized tree for us. Its eye-catching flowers usually peak here in late June and early July. Thus, it's no coincidence that we lined the July 4th parade route with goldenrain trees some years ago. They now provide a spectacular setting for the annual parade. The flowers remind me of bombs bursting in air.

Some of our goldenrain trees also draw calls each year for their pink "flowers" (seedpods) later in summer (probably 'Rose Lantern', though they weren't marked as such when we purchased



Dried goldenrain tree pods on a tree in New Mexico

them). The immature seed pods on many trees are just as colorful and eye-catching as the flowers themselves. The mature fruit later provides excellent winter texture. The species is tolerant of many soils, and is not bothered by occasional drought, salt, or subzero temperatures.

Our biggest challenge is finding nurseries that know how to grow goldenrain tree for street-side use. It can be rather decurrent in form without proper training in the nursery. Fortunately, more and more nurseries have figured out how to create single stemmed, well structured trees that will be able to spread their broad limbs over passing traffic and pedestrians.

—*Steve Cothrel, Superintendent of Parks & Forestry, Upper Arlington, Ohio*

The grounds maintenance department of the City of Country Club Hills, Illinois chose a winner this autumn when it planted a goldenrain tree on the campus of City Hall. Maria Lehner, director of the department and the city's arborist, chose a picturesque backdrop for the

tree. It was planted in November near the City arboretum and in front of a pond with ducks floating lazily by.

“I’ve been a fanatic of this tree for years,” Lehner says. “I first saw the goldenrain tree and its glorious yellow blooms while traveling through Nashville, Tennessee. I later saw it at The Morton Arboretum at a conference. I advise homeowners to plant them. This is a cool tree! We suggest that residents plant it to replace the many ash trees that were lost to Emerald Ash Borer.”

—*Margaret Seltzer, Director of Communications, City of Country Club Hills, Illinois*

Goldenrain tree is a versatile, medium-sized tree that grows well in a wide variety of climate conditions, tolerates varying soil types, and can take drought and wind. If given adequate rooting space (minimum 5 foot/1.5 m parkway, median, or cutout), it makes an attractive and tough 25 x 25 foot/7.6 x 7.6 m shade tree for inland, coastal, and even some mountain region landscapes in the West.

—*Stan Baczynski, Construction Inspector, Port of San Diego, California*

The goldenrain tree is a pest resistant, non-native ornamental. Here in Roanoke, it does not show invasive tendencies. The structure is sound. It does not break easily when loaded with snow or ice. Here, it blooms in late June—at a time when most other ornamentals have finished blooming—bringing with it a strong fragrance. The fall colors are brilliant. It is an attractive, hardy tree with nice shade and good limb structure and attachment. It is also drought tolerant.

One of the negatives of the tree is that it does not compete well with turf, but this problem is easily corrected with mulch. Some of the branches will cross, but light pruning will take care of this problem.

Overall, it is a desirable ornamental with few problems. I have two in my backyard which are greatly enjoyed.

—*John Blake Shores, Certified Arborist, Utility Specialist, Roanoke, Virginia.* 🌿