**Introduction**

A yellow carpet of fallen petals, delicate leaflets which cast a mosaic of welcoming shade, and large clusters of persistent rose-colored, papery capsules all help to make Chinese flame-tree a very popular landscape tree over a wide area of the South. One of only a few yellow-flowering trees for the mid- and deep-south landscape. This broad-spreading, deciduous tree reaches a height of 40 to 60 feet and eventually takes on a flat-topped, somewhat irregular silhouette. It is often used as a patio, shade, street, or specimen tree. The small, fragrant, yellow flowers appear in very showy, dense, terminal panicles in early summer, and are followed in late summer or fall by large clusters of the two-inch-long “Chinese lanterns”. These papery husks are held above the foliage and retain their pink color after drying and are very popular for use in everlasting flower arrangements. The bark on Chinese flame-tree is smooth and light brown when young, becoming ridged and furrowed as the tree matures. It is easily distinguished from Koelreuteria paniculata since Koelreuteria bipinnata has more upright branches and has twice compound leaves, whereas Koelreuteria paniculata has single pinnate compound leaves.

**General Information**

**Scientific name:** Koelreuteria bipinnata  
**Pronunciation:** kole-roo-TEER-ee-uh bye-pih-NAY-tuh  
**Common name(s):** Chinese flame-tree, bougainvillea goldenrain tree  
**Family:** Sapindaceae  

**USDA hardiness zones:** 7A through 10A (Fig. 2)  
**Origin:** not native to North America  
**Invasive potential:** This one is not listed on the UF/IFAS Assessment of the Status of Non-Native Plants in Florida’s Natural Areas  
**Uses:** reclamation; shade; street without sidewalk; specimen; parking lot island < 100 sq ft; parking lot island 100-200 sq ft; parking lot island > 200 sq ft; sidewalk cutout (tree pit); tree lawn 3-4 feet wide; tree lawn 4-6 feet wide; tree lawn > 6 ft wide; urban tolerant; highway median; container or planter  
**Availability:** not native to North America

---


2. Edward F. Gilman, professor, Environmental Horticulture Department; Dennis G. Watson, former associate professor, Agricultural Engineering Department, UF/IFAS Extension, Gainesville FL 32611.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. For more information on obtaining other UF/IFAS Extension publications, contact your county’s UF/IFAS Extension office.

U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A & M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Nick T. Place, dean for UF/IFAS Extension.
**Description**

Height: 20 to 35 feet  
Spread: 25 to 35 feet  
Crown uniformity: irregular  
Crown shape: round  
Crown density: open  
Growth rate: fast  
Texture: medium

**Foliage**

Leaf arrangement: alternate (Fig. 3)  
Leaf type: bipinnately compound  
Leaf margin: incised, serrate  
Leaf shape: ovate, oblong  
Leaf venation: pinnae  
Leaf type and persistence: deciduous  
Leaf blade length: 2 to 4 inches  
Leaf color: green  
Fall color: yellow  
Fall characteristic: showy

**Flower**

Flower color: yellow  
Flower characteristics: very showy

**Fruit**

Fruit shape: oval, elongated  
Fruit length: 1 to 3 inches  
Fruit covering: dry or hard  
Fruit color: pink  
Fruit characteristics: does not attract wildlife; showy; fruit/leaves not a litter problem

**Trunk and Branches**

Trunk/bark/branches: branches droop; not showy; typically one trunk; thorns  
Pruning requirement: needed for strong structure  
Breakage: susceptible to breakage  
Current year twig color: brown  
Current year twig thickness: very thick  
Wood specific gravity: unknown

**Culture**

Light requirement: full sun  
Soil tolerances: clay; sand; loam; alkaline; acidic; extended flooding; well-drained  
Drought tolerance: high  
Aerosol salt tolerance: moderate

**Other**

Roots: not a problem  
Winter interest: no  
Outstanding tree: yes  
Ozone sensitivity: unknown  
Verticillium wilt susceptibility: susceptible  
Pest resistance: resistant to pests/diseases

**Use and Management**

Trees need to be trained when young to develop a strong branch structure. On weak-wooded trees such as Chinese flame-tree, spacing main branches apart along a central trunk is crucial to developing a durable tree. As soon as you see them, remove any double or multiple trunks which develop, especially if they have embedded or pinched bark in the branch crotch. Be sure to locate the first major branch high enough off the ground so that drooping leaves and branches will not get in the way of traffic below. Train major branches so they grow up and out, spreading from the trunk to create the clearance needed for street tree or parking lot planting.

The tree definitely has a place in many landscapes. Planted in a full sun location, Chinese flame-tree makes a moderately dense shade tree, but there is considerable variation among individuals of the species. Properly pruned and
trained trees can be planted as street or parking lot trees, but do not commit large areas to Chinese flame-tree due to the possibility of them breaking up as they reach about 30 years old. They will be the source of many compliments when they are in flower and fruit.

This is a tough tree which should be grown in full sun on any well-drained soil, in sand or heavy clay, and should receive moderate watering. The tree becomes leggy and thin in partial shade. When well-established, it tolerates wind, air pollution, salt, heat, and drought.

Propagation is by seed, which will germinate within six to eight days.

Some nurseries are mistakenly growing *Koelreuteria elegans* or *Koelreuteria formosana* which are only cold hardy to USDA hardiness zone 9 instead of *Koelreuteria bipinnata* which is cold hardy to USDA hardiness zone 7b. This problem has given Chinese flame-tree a bad name in some areas of the mid-south. Be sure to get northern seed source for propagation to ensure cold hardiness in the northern part of its range.

**Pests and Diseases**

No pests or diseases are of major concern. Root rot on old trees. A canker causes dead and sunken areas on the bark. Coral pink fruiting bodies develop on the diseased bark. Prune out infected branches and fertilize to maintain tree health.

Verticillium wilt attacks *Koelreuteria*. The disease causes wilting and death of leaves on infected branches. Eventually the entire tree may be killed. Fertilize to stimulate growth. There are no chemical controls.