INTRODUCTION

Goldenraintree grows 30 to 40 feet tall with an equal spread, in a broad, somewhat irregular globe-shape (Fig. 1). Some trees appear vase-shaped. Although it has a reputation for being weak wooded, it is rarely attacked by pests and grows in a wide range of soils, including high pH soils. Goldenraintree tolerates dryness and casts little shade because of the open growth habit. It makes a good street or parking lot tree, particularly where overhead or soil space is limited, due to its adaptive abilities. The tree grows moderately and bears large panicles of bright yellow flowers in May (USDA hardiness zone 9) to July (USDA hardiness zone 6) when few other trees bloom. It is not as showy as Koelreuteria bipinnata but is much more cold-tolerant. The seed pods look like brown chinese lanterns and are held on the tree well into the fall.

GENERAL INFORMATION

Scientific name: Koelreuteria paniculata
Pronunciation: kole-roo-TEER-ee-uh
pan-ick-yoo-LAY-tuh
Common name(s): Goldenraintree, Varnish-Tree
Family: Sapindaceae
USDA hardiness zones: 5B through 9 (Fig. 2)
Origin: not native to North America
Uses: container or above-ground planter; large parking lot islands (> 200 square feet in size); wide tree lawns (>6 feet wide); medium-sized parking lot islands (100-200 square feet in size); medium-sized tree lawns (4-6 feet wide); recommended for buffer strips around parking lots or for median strip plantings

Figure 1. Middle-aged Goldenraintree.

in the highway; reclamation plant; shade tree; small parking lot islands (< 100 square feet in size); narrow tree lawns (3-4 feet wide); specimen; sidewalk cutout (tree pit); residential street tree; tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought are common
Availability: generally available in many areas within its hardiness range

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**Koelreuteria paniculata -- Goldenraintree**

**DESCRIPTION**

**Height:** 30 to 40 feet  
**Spread:** 30 to 40 feet  
**Crown uniformity:** irregular outline or silhouette  
**Crown shape:** round; vase shape  
**Crown density:** open  
**Growth rate:** medium  
**Texture:** coarse

**Foliage**

**Leaf arrangement:** alternate (Fig. 3)  
**Leaf type:** even pinnately compound; odd pinnately compound  
**Leaflet margin:** lobed; incised; serrate  
**Leaflet shape:** oblong; ovate  
**Leaflet venation:** pinnate  
**Leaf type and persistence:** deciduous  
**Leaflet blade length:** 2 to 4 inches; less than 2 inches  
**Leaf color:** green  
**Fall color:** yellow  
**Fall characteristic:** showy

**Flower**

**Flower color:** yellow  
**Flower characteristics:** summer flowering; very showy

**Fruit**

**Fruit shape:** elongated; oval  
**Fruit length:** 1 to 3 inches  
**Fruit covering:** dry or hard  
**Fruit color:** brown; green  
**Fruit characteristics:** does not attract wildlife; no significant litter problem; persistent on the tree; showy

**Trunk and Branches**

**Trunk/bark/branches:** bark is thin and easily damaged from mechanical impact; droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; not particularly showy; should be grown with a single leader; no thorns  
**Pruning requirement:** requires pruning to develop strong structure  
**Breakage:** resistant

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*Figure 2. Shaded area represents potential planting range.*
**Current year twig color:** brown  
**Current year twig thickness:** thick

**Culture**

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

**Other**

**Roots:** surface roots are usually not a problem  
**Winter interest:** no special winter interest  
**Outstanding tree:** tree has outstanding ornamental features and could be planted more  
**Invasive potential:** No entries found.  
**Ozone sensitivity:** sensitive or moderately tolerant  
**Verticillium wilt susceptibility:** susceptible  
**Pest resistance:** long-term health usually not affected by pests

**USE AND MANAGEMENT**

The root system is coarse with only a few but large roots, so transplant when young or from containers. Do not transplant in the fall as success rate is reportedly limited. Considered a city tolerant tree due to tolerance to air pollution and ability to withstand drought, heat and alkaline soils. It also tolerates some salt spray but requires well-drained soil. It would be hard to find a more adaptive yellow flowering tree for urban planting. It makes a nice patio tree, creating light shade but its brittle wood can break easily in windy weather.

The tree has only a few branches when it is young and some pruning to increase branchiness helps sell the tree. Prune the tree early to space major branches along the trunk to create a strong branch structure and the tree will be longer-lived and require little maintenance. Dead wood is often present in the canopy and should be removed periodically to maintain a neat appearance. Only single-stemmed trees trained in the nursery with well-spaced branches should be planted along streets and parking lots.

One cultivar is listed; ‘Fastigiata’ - upright growth habit.

**Pests**

Occasional attacks by scale may be seen. Sprays of horticultural oil control overwinter stages. Boxelder bug can be a menace.

**Diseases**

*Koelreuteria* is subject to few diseases. 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.