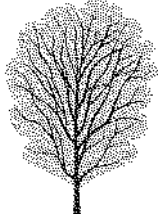


# *Gymnocladus dioica* (= *G. dioicus*) - Kentucky Coffeetree (*Fabaceae* or *Leguminosae*)

*Gymnocladus dioica* is a large tree that gives semi-filtered shade, good for its very bold texture and rapid growth. Kentucky Coffeetree often has an irregular shape in youth, but becoming upright oval to spreading rounded and very majestic in appearance with age.

## Form



## FEATURES

-large shade tree  
-maturing at about 70' tall x 50' wide, although specimen trees in open areas can get much larger  
upright irregular growth habit in youth (often being gangly, sparsely, and coarsely branched), but becoming upright oval to upright rounded and symmetrical with maturity

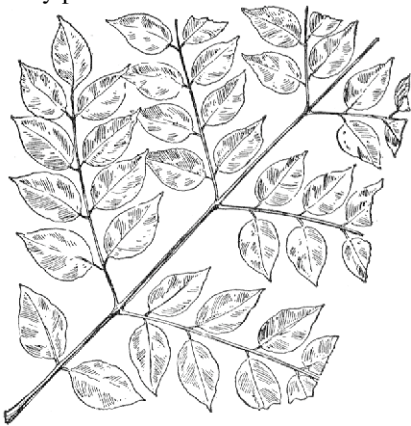
-rapid growth rate in youth, slowing to a medium growth rate with maturity

## Culture

-full sun to partial sun  
-very adaptable and urban tolerant, especially to heat, drought, very alkaline pH soils, soil compaction, and wet sites  
-propagated by seeds and by rooted cuttings  
-no serious disease or pest problems  
moderately available in B&B form

## Foliage

-alternate, bipinnately compound and very large, up to 3' long x 2' wide  
-leaflets emerge deeply bronzed, quickly turning to medium green and then dark green or blue-green by mid-summer; each leaflet about 2" long, ovate, arranged in alternate fashion along the pinnae, with 3 to 7 pairs of pinnae arranged in opposite fashion along the huge rachis  
-the rachis (with its swollen base) persists on the tree during early winter, after leaflet and pinnae abscission, but leaves behind a huge leaf scar upon abscission  
-autumn color is usually yellowish green and ornamentally poor



## Flowers

-inflorescences occur in late May and early June, but are often hidden in the expanding foliage  
-staminate (male) and pistillate (female)  
inflorescences either occur on separate trees (dioecious) or a mixture of unisexual (male or female) flowers and bisexual (perfect) flowers occur on the same tree (polygamo-dioecious)

-female inflorescences are up to 10" long and pyramidally shaped, with the males about one-third as large, both having green-white to blue-white flowers and rather fragrant (but not noticed due to the height of flowering branches on mature trees)

## Fruits

-8" long and 0.75" thick, bold-textured purplish-brown stout pods mature in autumn, containing seeds (with a very hard seedcoat) embedded within the sweet and sticky pulp of the fruit  
-the pods dry and persist in pendulous clusters from stout branches throughout much of the winter  
-heavy fruit crops are not borne every year  
-brown seeds were roasted or boiled and used by the early American pioneers as a coffee substitute, hence the common name

## Twigs

-brown to gray, very stout and rough, irregular or contorted in its bracing pattern, and having huge alternate leaf scars  
-becoming scaly and ridged at a young age, and with relatively few twigs per branch

## Trunk

-single trunk soon gives rise to several main spreading or ascending large branches  
-ornamental bark is medium to dark gray, with prominent overlapping plates on the branches and trunk

## USAGE

### Function

-shade, specimen, or focal point tree

### Texture

-bold texture in foliage and extremely bold-texture when bare  
-open density when in foliage in youth, but having an average to thick density in foliage with maturity  
open density when bare, from youth through maturity

### Assets

-very bold year-round texture (especially in winter) with its coarse branching, platy bark, and relatively few twigs

### ornamental bark

-shade is somewhat filtered, due to sparsity of twigs and bipinnately compound foliage

-very urban tolerant and very tolerant of alkaline (calcareous, chalky, or limestone-based) soils  
wet or dry site tolerant

### Liabilities

-irregular branching pattern in youth may be quite awkward and asymmetrical (if left unpruned), and can get out-of-bounds with age if improperly sited in restricted areas (this is not a shade tree for the small urban yard)

-fruit pod litter from some trees in late winter

### Habitat

-Zones 3 to 8

-Native to bottomlands of the Eastern, Midwestern, and Central U.S.

## SELECTIONS

### Alternates

-large trees having very bold texture (*Ailanthus altissima*, *Carya ovata*, *Juglans nigra*, *Quercus macrocarpa*, etc.)

### Cultivars – Variants – Related species

-straight species is the only form available, although male selections can occasionally be found (for fruitless character)