

Celtis australis: European Hackberry¹

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Introduction

European hackberry is a deciduous tree, 40 to 70 feet tall by 40 to 50 feet wide, with smooth, light grey, somewhat warty bark and a wide, broad, rounded canopy, making it a good potential shade tree. The 6-inch-long, sharply toothed leaves are dark grey/green throughout the year fading to a pale yellow before falling in autumn. Tiny, round, dark purple fruits hang in short clusters and are extremely popular with birds and other wildlife. But they are hard and people can roll and slip on them when they drop onto sidewalks and other hard surfaces.



Figure 1. Middle-aged *Celtis australis*: Mediterranean hackberry.
Credits: Ed Gilman, UF/IFAS

General Information

Scientific name: *Celtis australis*

Pronunciation: SELL-tiss oss-TRAY-liss

Common name(s): Mediterranean hackberry, European hackberry

Family: *Ulmaceae*

USDA hardiness zones: 6B through 9B (Figure 2)

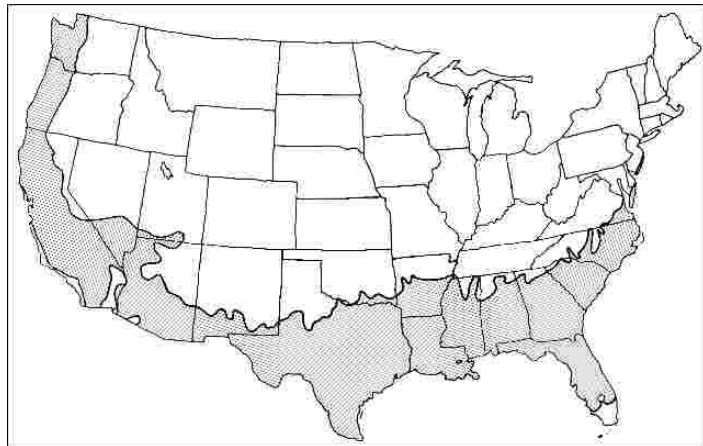


Figure 2. Range

Origin: not native to North America

Invasive potential: not assessed/incomplete assessment

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Uses: tree lawn > 6 ft wide; street without sidewalk; reclamation; shade; bonsai; highway median

Description

Height: 40 to 70 feet

Spread: 40 to 50 feet

Crown uniformity: irregular

Crown shape: round, spreading

Crown density: moderate

Growth rate: fast

Texture: medium

Foliage

Leaf arrangement: alternate (Figure 3)

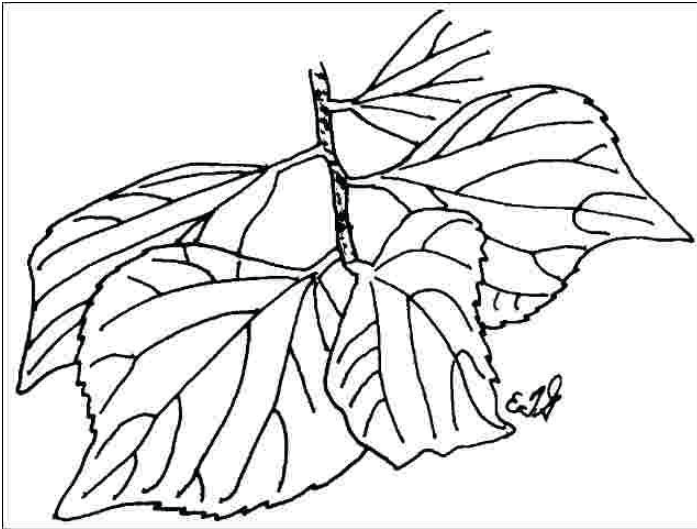


Figure 3. Foliage

Leaf type: simple

Leaf margin: serrate

Leaf shape: ovate

Leaf venation: pinnate, bowed, reticulate

Leaf type and persistence: deciduous

Leaf blade length: 4 to 8 inches

Leaf color: green

Fall color: yellow

Fall characteristic: not showy

Flower

Flower color: unknown

Flower characteristics: not showy

Fruit

Fruit shape: round

Fruit length: less than 0.5 inch

Fruit covering: fleshy

Fruit color: purple

Fruit characteristics: attracts squirrels/mammals; not showy; fruit/leaves a litter problem

Trunk and Branches

Trunk/bark/branches: branches droop; showy; typically one trunk; thorns

Pruning requirement: needed for strong structure

Breakage: susceptible to breakage

Current year twig color: green, brown

Current year twig thickness: thin

Wood specific gravity: unknown

Culture

Light requirement: full sun

Soil tolerances: clay; sand; loam; slightly alkaline; acidic; well-drained

Drought tolerance: high

Aerosol salt tolerance: moderate

Other

Roots: can form large surface roots

Winter interest: yes

Outstanding tree: no

Ozone sensitivity: unknown

Verticillium wilt susceptibility: unknown

Pest resistance: resistant to pests/diseases

Use and Management

Trees benefit from some pruning in the nursery and landscape. Often, there are only a small number of large-diameter branches in the crown, and these can develop embedded bark next to the trunk if they are allowed to become very large relative to the size of the trunk. This problem can be avoided by pruning back these branches to slow their growth so more, smaller-diameter dominant branches develop in the crown. Be sure that branches arise from the trunk at a wide angle and slow the growth of these branches by pruning. This will help the tree develop a strong branch structure since hackberry appears to develop embedded bark on major branches more often than some other trees. But large-diameter surface roots can form (particularly in poorly-drained soil), raising sidewalks and making mowing grass difficult. Locate the tree 8-feet or more from a sidewalk or street to help keep them intact.

Hackberry has a reputation for internal trunk rot, particularly following mechanical injury to the trunk. Locate the tree so it will not be injured by mowing equipment or other vehicles, and keep grass away from the base of the trunk so string trimmers will not cause injury.

European hackberry will display quickest growth in full sun on moist soil but will tolerate poorer soil conditions very well with slower growth. It is moderately drought-tolerant.

Propagation is by seed, layering, and cuttings.

Pests and Diseases

No pests or diseases are of major concern but twigs may occasionally die from the parasitic fungus which causes witches' broom. Affected wood should simply be removed when noticed. It is not often seen with the leaf gall which is so common on *Celtis occidentalis*.