**Celtis australis**
Mediterranean Hackberry

Edward F. Gilman and Dennis G. Watson

**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 (Fig. 1). The six-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.

**GENERAL INFORMATION**

- **Scientific name:** *Celtis australis*
- **Pronunciation:** SELL-tiss oss-TRAY-liss
- **Common name(s):** Mediterranean Hackberry, European Hackberry
- **Family:** Ulmaceae
- **USDA hardiness zones:** 7B through 9 (Fig. 2)
- **Origin:** not native to North America
- **Uses:** Bonsai; wide tree lawns (>6 feet wide); recommended for buffer strips around parking lots or for median strip plantings in the highway; reclamation plant; shade tree; residential street tree
- **Availability:** grown in small quantities by a small number of nurseries

**DESCRIPTION**

- **Height:** 40 to 70 feet
- **Spread:** 40 to 50 feet
- **Crown uniformity:** irregular outline or silhouette
- **Crown shape:** round; spreading
- **Crown density:** moderate
- **Growth rate:** fast
- **Texture:** medium

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Foliage

Leaf arrangement: alternate (Fig. 3)
Leaf type: simple
Leaf margin: serrate
Leaf shape: ovate
Leaf venation: bowed; pinnate; 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 characteristics: inconspicuous and not showy; spring flowering

Fruit

Fruit shape: round
Fruit length: < .5 inch
Fruit covering: fleshy
Fruit color: purple
Fruit characteristics: attracts birds; attracts squirrels and other mammals; inconspicuous and not showy;
fruit, twigs, or foliage cause significant litter

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; showy trunk; should be grown with a single leader; no thorns
Pruning requirement: requires pruning to develop strong structure
Breakage: susceptible to breakage either at the crotch due to poor collar formation, or the wood itself is weak and tends to break
Current year twig color: brown; green
Current year twig thickness: thin

Culture

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

**Roots:** surface roots can lift sidewalks or interfere with mowing
**Winter interest:** tree has winter interest due to unusual form, nice persistent fruits, showy winter trunk, or winter flowers
**Outstanding tree:** not particularly outstanding
**Invasive potential:** little, if any, potential at this time
**Pest resistance:** long-term health usually not affected by pests

**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 eight 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*.