**Celtis occidentalis** - American or Common Hackberry (*Ulmaceae*)

*Celtis occidentalis* is a tough tree for urban or rural sites, growing rapidly to provide shade, windbreak, and/or erosion control under stressful conditions.

### Features

- **Form**
  - large deciduous tree
  - maturing at 70' tall x 50' wide
  - upright oval growth habit in youth, quickly losing its central leader and becoming rounded to irregular in habit with age
  - rapid growth rate

- **Culture**
  - full sun
  - prefers moist soils but is adaptable to many adverse conditions, including wet or dry sites and poor soils
  - propagated primarily by seed but also by rooted stem cuttings or grafted onto seedling understock
  - Elm Family, with several diseases and pests, but not including Dutch elm disease
  - witches' broom is a dense clustering of miniature stems and foliage, caused by the combination of a mite and a fungus
  - nipple gall on summer and autumn foliage is a cosmetic leaf disease
  - chlorotic foliage in summer is indicative of alkaline soils that result in manganese deficiency to the tree
  - moderate availability, usually B&B
  - often a volunteer tree in waste sites, fence rows, etc. that is left for shade or windbreak function (or is too big to conveniently cut down)

- **Foliage**
  - alternate arrangement; medium green in color
  - serrated, ovate, with the base of the leaf skewed (unsymmetrical or lop-sided, like the foliage of most Elm Family members)
  - often gets nipple gall in spring
  - autumn color yellowish green to green

- **Flowers**
  - greenish-yellow in Apr.-May, a mixture of staminate, pistillate, and perfect flowers, giving a fine texture and lime color to the tree in early spring as the foliage begins to emerge

- **Fruits**
  - greenish small round fruits in leaf axils, changing to orange or purple in color at maturity in Sept.-Oct. and devoured by birds

- **Twigs**
  - light gray, zigzag and irregular in growth pattern
  - sometimes affected with witches' brooms
  - stems have no terminal buds and are often knobby
  - lateral stems often die back a few inches to give a ragged appearance to the ends of branches

- **Trunk**
  - light gray to gray-green
  - very corky to warty ornamental bark, slowly becoming platy with age
  - often to 3' or more in diameter on old trees, with significant basal flair
  - wood is much stronger than Silver Maple (another quick shade tree)

### Usage

- **Function**
  - shade tree (for highly stressed, poor soil, or wet soil sites where rapid growth is needed), deciduous windbreak, pioneer invader tree

- **Texture**
  - medium texture overall in foliage and when bare (fine-textured twigs, but bold and irregular branching pattern)
  - average density in foliage but thick when bare

- **Assets**
  - urban tolerant (dry sites, soil compaction, pollution, wind, heat, acid or alkaline soil tolerant), ornamental bark, rapid growth, adaptable to wet sites

- **Liabilities**
  - poor autumn color, gets very large for urban areas (in canopy height and width, and trunk girth)
  - leaf (nipple gall) and twigs (witches' broom) cosmetic diseases
  - causes bird waste litter in early autumn due to their fruit overconsumption
  - shedding twigs and occasional twigs winter dieback
  - chlorotic foliage in alkaline soils is the result of manganese deficiency

- **Habitat**
  - Zones 2 to 9
  - Native to floodplains of the Eastern U.S.

### Selections

- **Alternates**
  - large shade trees for stressful sites where poor environmental conditions exist (*Ailanthus altissima*, *Fraxinus americana*, *Gleditsia triacanthos var. inermis*, *Morus rubra*, *Ulmus parvifolia*, etc.)
  - large shade trees with ornamental bark (*Betula nigra*, *Fagus sylvatica*, *Fraxinus americana*, *Gleditsia triacanthos var. inermis*, *Ulmus parvifolia*, etc.)

- **Cultivars – Variants – Related species**
  - *Celtis occidentalis* 'Chicagoland' - maintains a single, relatively straight trunk throughout most of its life
  - *Celtis occidentalis* 'Prairie Pride' - possesses a uniformly oval canopy, lustrous dark green thick foliage, stems that do not develop witches' broom, and low fruit set