

How to Plant and Take Care of Your Honeylocust Tree

Dr. Mike Kuhns, Utah State University Extension Forester

Introduction

This fact sheet includes directions for growing your own honeylocust tree from a seed. It assumes that you have honeylocust (Latin name *Gleditsia triacanthos*) seeds available to plant, preferably two per student. Seeds can be purchased from various sources on-line, or can be obtained by looking for a non-seedless honeylocust tree in your area and harvesting the pods from it, then separating out the seeds.

What is a honeylocust tree?

Honeylocust trees are members of the legume family and are native from the eastern Great Plains, south to the Gulf of Mexico, northeast to Pennsylvania, and north to southern Michigan, Wisconsin, and Minnesota. They like full-sun and are fairly fast growing. Honeylocust prefers rich, moist sites but also does well on drier sites and often invades old abandoned agricultural fields or pastures. Though nearly all native trees have long, branched thorns and long, brown seed pods, the honeylocust trees commonly planted in cities are thornless and often seedless. Honeylocust makes a good landscape tree because of its toughness, pleasing form and appearance, and ability to grow in most areas of the U.S. A description of the tree is as follows:

Honeylocust (*Gleditsia triacanthos*)

Leaves: Alternate; once and twice pinnately compound; once pinnately compound leaves with 15 to 30 nearly stalk-less leaflets; twice pinnate leaves with 4 to 7 pairs of lateral "branches"; leaflets up to 1 1/2" long by 3/4" wide; leaflet tip pointed or rounded; yellow color in fall.

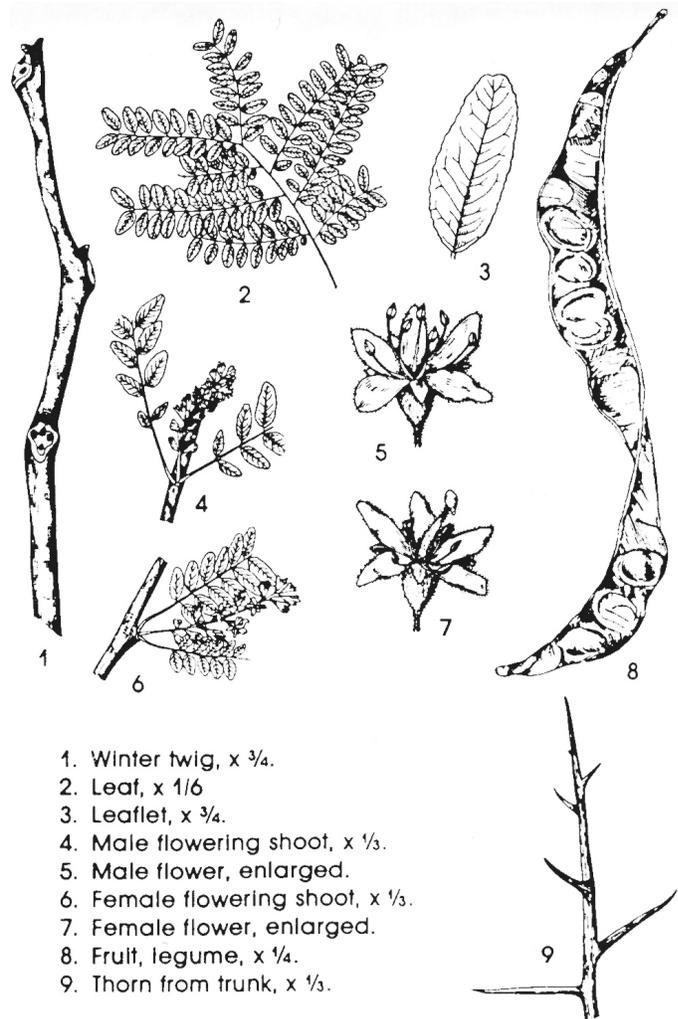
Twigs: Stout to slender; glossy; zigzag; often having stiff, branched, brown to red thorns 3" to 12" long; thornless varieties more often planted. No terminal bud; lateral buds small, nearly hidden by bark, 3 or more at each leaf scar.

Fruit: Flat, strap-shaped pod; red-brown; twisted; 12" to 18" long; containing 12-14 dark brown, oval seeds; some varieties do not bear fruit.

Bark: Smooth and gray on younger branches; on older stems gray to nearly black, and broken by vertical furrows into plates or scaly ridges.

Wood: Slightly important; sapwood yellow; heartwood red-brown; growth rings conspicuous; ring-porous; rays conspicuous to naked eye; used for veneer and firewood.

General: Native to the eastern Great Plains and most of the eastern U.S. Very hardy and drought resistant. Often invades old fields. Thornless, fruitless varieties are often planted as shade trees. Though a legume, this species does not fix nitrogen. Shade intolerant.



1. Winter twig, x 3/4.
2. Leaf, x 1/6
3. Leaflet, x 3/4.
4. Male flowering shoot, x 1/3.
5. Male flower, enlarged.
6. Female flowering shoot, x 1/3.
7. Female flower, enlarged.
8. Fruit, legume, x 1/4.
9. Thorn from trunk, x 1/3.

Planting and caring for your honeylocust--

●Materials – you will need:

1. Milk carton, pot, or other container with drainage holes (1 quart size is good; smaller is OK).
2. Potting soil or good, native soil with organic matter mixed in; enough to fill potting container.
3. Waterproof tray to hold drainage from pot.
4. Sandpaper or file (optional).
5. Seeds.

●Seed preparation – this treatment helps crack the hard seed coat and simulates the processes that go on in nature when the pod and seed are eaten by an animal and pass through its digestive system (do this when you are ready to plant seeds):

1. Bring water just to boiling in a heat-proof container (water volume should be 3 to 4 times the volume of the seeds you are treating).
2. Remove water from heat source and let stand for one minute (if you have a thermometer, water temperature should be about 190°F).
3. Pour seeds into hot water. Then allow water to cool to room temperature. Remove seeds after they begin to swell; seeds can be allowed to swell up to 3 times their normal size.
4. Plant seeds immediately after boiling water treatment; do not store.
5. Alternatively, have the students vigorously rub the seeds on a piece of medium or fine sandpaper or a file, then plant.

●Planting:

1. Fill your pot or other container with soil or potting mix; water thoroughly, let the soil settle, and refill to bring the soil level up to within 1/2" to 1" of the top. Be sure that holes in the pot are adequate to allow quick drainage of extra water.
2. Plant seeds in moist soil 1/2" to 3/4" deep and cover with soil. Seed orientation does not matter. More than one seed can be planted in a pot to ensure that at least one germinates (space well apart).
3. A clear plastic bag or plastic wrap can be placed loosely over the top of the pot to help keep moisture and warmth in. Puncture the plastic in several places to allow some heat to escape.
4. Place the pot on a waterproof tray or dish in a sunny spot. Keep away from radiators or heat registers that might get the germinating seeds too warm.
5. Germination and shoot emergence should take 10 to 14 days (could take up to 21 days). Remove plastic as soon as shoot emerges and snip off the weakest shoot with scissors if both seeds germinate.

●Care:

1. Water before and after germination when the soil just below the surface begins to dry. Soil should remain moist but not waterlogged.
2. If the tree remains in the pot for longer than a month or so you should use a liquid fertilizer solution occasionally to keep it healthy. Follow directions on the fertilizer package.

●Planting outside (tree can be kept in the pot and grown indoors as a house plant if you like):

1. Plant in the fall or the next spring (tree can over-winter with its pot buried in the garden).
2. Near planting time if tree has been inside move outside to a protected location to "harden off".
3. Dig a hole as deep as the pot and 2-3 times as wide. Then carefully remove the pot and place the intact root ball in the hole, backfilling with native soil around the sides and tamping gently.
4. Water thoroughly and care-for as you would any other tree.

●Activities:

- Record information about your tree and its growth--date of planting and germination, periodic height and stem diameter measurements, appearance, etc.
- Find a mature honeylocust tree and compare it with your tree.
- Keep a diary (with photos) of the life of your tree from seed to soil.