

Inlay Grafting Pecans

Cooperative Extension Service
College of Agriculture and
Home Economics



Guide H-623 • PH 6-300

Reviewed by Esteban Herrera, Extension Horticulturist

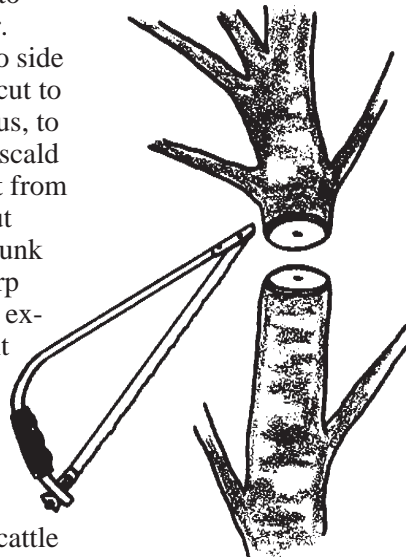
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Inlay grafting is one of the best and most popular systems of propagating pecans now in use. Grafting was the original method employed by Antoine, the gardener, in Louisiana in 1845. He is credited as the first to successfully propagate pecans. The inlay bark graft is simply a refined procedure that has proved to have definite advantages over the old standard bark graft.

The Texas method of inlay grafting, initiated in the 1950's, follows most basic fundamentals of the standard inlay graft procedure, but employs an entirely new system of covering the graft and stock. Aluminum foil provides the base cover, reflecting sunlight and reducing temperatures around the inlay. Polyethylene plastic film, the final cover, assures constant high relative humidity around the inlay. This system not only results in a higher percentage of growing grafts, but also is easy to use. All equipment necessary to do the job can be carried in an apron since the need for a burdensome wax melter is eliminated.

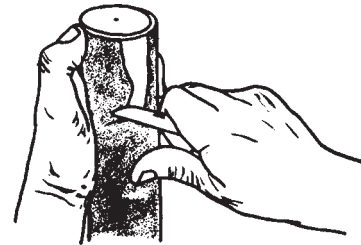
Anyone can do inlay grafting by following instructions and practicing to develop skill in basic techniques.

1. Use pecan trunks or side limbs 1 1/2" to 3 1/2" in diameter. Leave one or two side branches below cut to keep tree vigorous, to protect from sunscald and to keep graft from overgrowing. Cut straight across trunk to limb with sharp saw (bow saw is excellent) at a point above a section where the trunk or limb is straight. Make cut 7 or 8 feet above ground if cattle or horses are grazing in pecan grove.



2. Select a section of stock with a flat surface so the flat cut surface of graft stick will fit securely. Choose a spot on the south or south-western side so prevailing wind will blow graft into the tree instead of away.

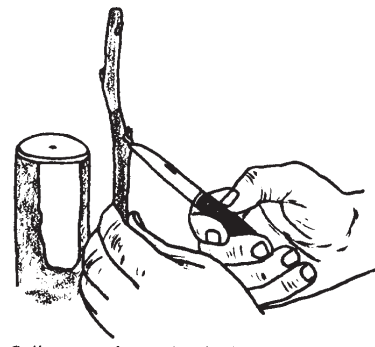
Cut a clean shield by removing a thin layer of the rough outer bark. Leave the bark as thick as possible so as to hold the graft securely.



3. Collect graftwood of desired variety in late February or early March while tree is dormant. Secure 1-year wood 1/4" to 1/2" in diameter. Can use wood up to 3/4" in diameter. Select smooth, straight wood with 2 or 3 plump buds at each node.

Pack graftwood in polyethylene bag, egg, can or wooden box in a moist (not wet) material such as sphagnum moss, sawdust, or shavings. Store as near 32°F as possible.

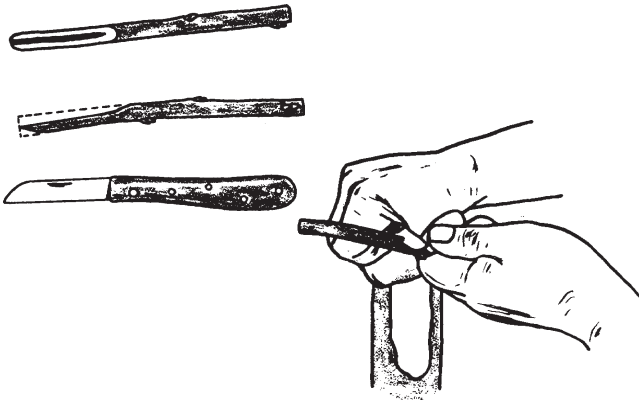
Keep graftwood on cold storage until the day it is used. Cut graftstick with 2 or 3 strong buds and at least 6 inches long for easy handling.



- Use a knife as illustrated with a sharp grafting blade. Hold knife firmly and with a level trajectory make a smooth, straight cut 2 1/2" to 3 1/2" long.

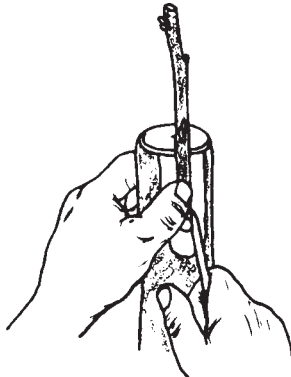
Start the cut about 3" from the bottom of graft on the opposite side and a little below the lowest bud. This "insurance bud" is in a reserve position.

A slanting shoulder of 1/4" to 1/2" long will allow graft to be set in an upright position. The shoulder or slanting cut extends about half the distance through the graft stick; the remaining level cut is the same thickness from the edge of the shoulder to the end of the graft stick. Make the entire surface of cut smooth and level. Avoid a wavy surface. Turn the graft stick over and make a chisel-shaped cut about 1/2" to 1/4" long on the back side of the lower end. This makes it easier to insert graft and provides more uniting surface.

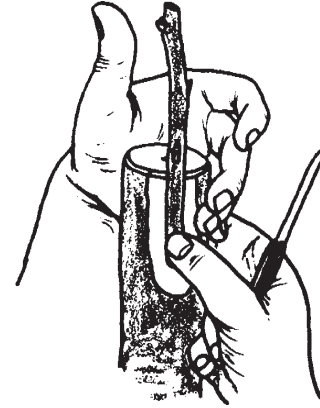


- Place cut surface of graft against shaved shield on stock. Allow 1/4" to 1/2" cut surface shoulder to extend above stock. Hold graft firmly upright with left thumb. Begin cut at top of stock on the right side of graft. Cut through bark down to the wood.

Draw knife blade straight down the right side to within 1/2" to 2/4" of the bottom portion of the graft. Make cut straight into the bark Do not angle the cut inward.



- Hold graft firmly in position with thumb of right hand. Do not allow graft to move after first side cut is made. Bring the left hand around back of stock. Catch graft with first 3 fingers of left hand and hold in exact position.



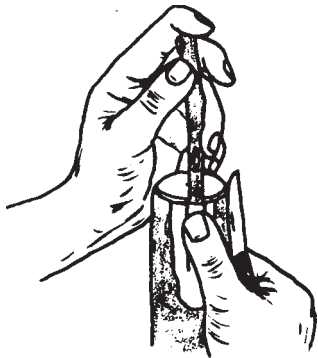
- Make the cut on the left side of the graft identical to the cut on the right side.



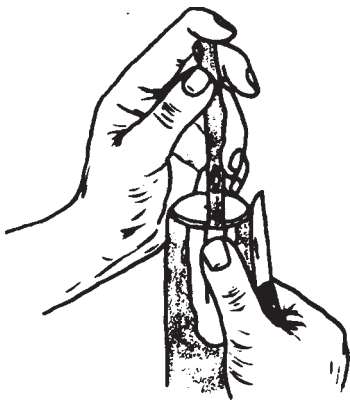
- Two parallel cuts through bark form an inlay pattern. This inlay pattern should be exactly the same size as the lower section of the graft.



9. Peel back the inlay flap of bark $\frac{1}{2}$ " to 1" between two parallel cuts. Start chiseled end of graft into slot with the level cut flat against wood of the stock.



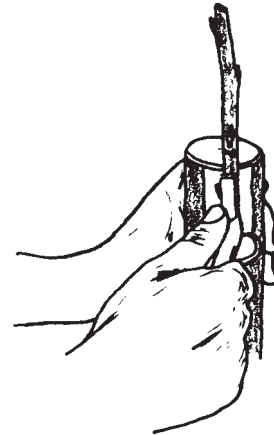
10. Press the flap of bark against the graft with the thumb of the right hand to hold graft firmly in the inlay slot. Apply firm pressure on top of graft to force it into inlay slot.



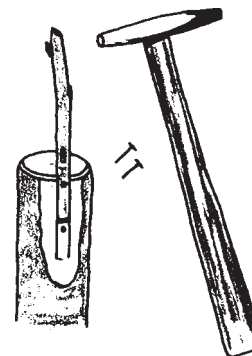
11. Push graft into inlay slot until the $\frac{1}{4}$ " to $\frac{1}{2}$ " cut surface of the shoulder is above the top of the stock. This cambium around the bark of cut surface will form a callus roll that will cover the top of the stock and anchor the graft securely to the stock.



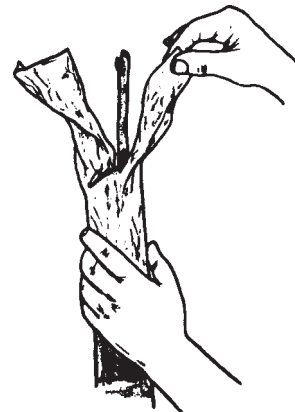
12. Remove about half of the flap of bark with the grafting knife.



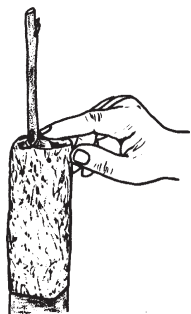
13. Secure the graft by use of two 18-gauge wire nails, $\frac{1}{2}$ " or $\frac{3}{4}$ " long. Drive the nails carefully with a tack or small hammer. Place one nail through the flap of bark and into graft just above chiseled surface. Place one nail through graft near the top of the stock.



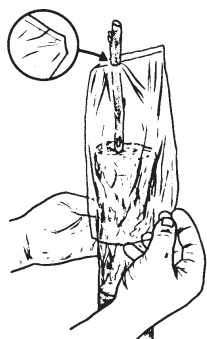
14. Take an 8", 10", or 12" square of aluminum foil (regular household); tear or cut a line down to the center of the square. Fold the aluminum foil square around stock so that the bottom of the tear fits right under the "insurance bud."



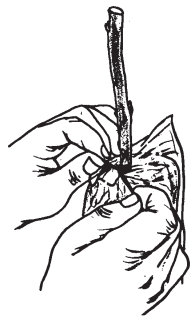
15. Fold each side of the divided end of the square of aluminum foil. Cover all cut surfaces with the foil, including the overlap shoulder of the graft. Crimp the foil to form a loose mold around the stock.



16. Cut off one corner of a pint or quart-size polyethylene bag to make a hole at that point. Slip the bag over the graft and work the graft through the hole. Pull the bag down gently until the cut corner rests just below the “insurance bud.”



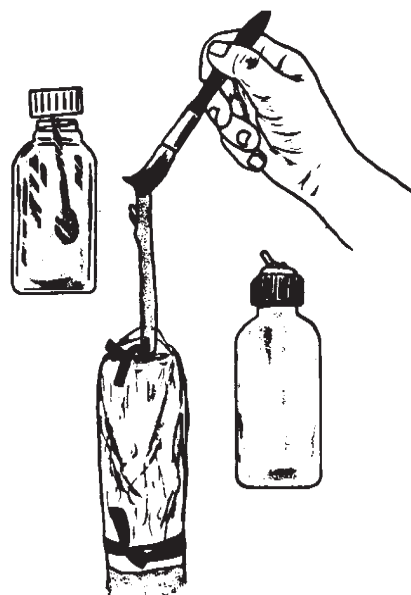
17. Tie the polyethylene bag at the cut corner around the graft and just below the “insurance bud” and above the cut surface of the overlap shoulder. Tie with a rubber band, small rubber budding strip or polyethylene tape, so that the graft will not suffer girdling damage.



18. Tie the lower end of the polyethylene bag around the stock. Use polyethylene tape, plastic electrical tape, or a large rubber budding strip to secure the lower end of the bag.



19. Coat the cut surface of the tip end of the graft with orange shellac. Use the shellac from a closed container with a paint brush, or shoe shine bottle with a dauber, or from a plastic dispenser bottle with a flip spout.



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