FACT SHEET

L-1596

GREENWOOD GRAFTING

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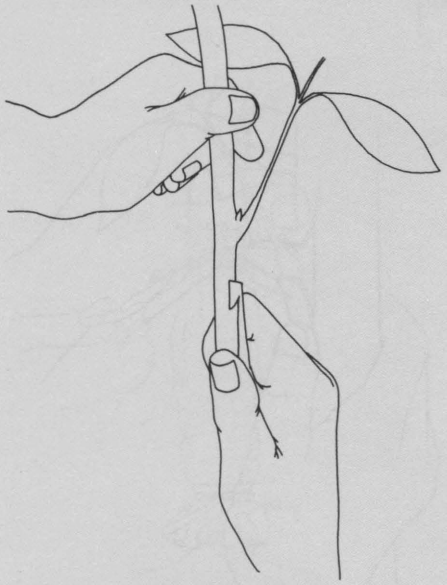
Greenwood grafting allows growers to propagate desired fruit and nut varieties during the growing season after the time for grafting with dormant scions has ended. This method has been successful with pecans, walnuts, apples, apricots and plums; the procedure will probably work with most other deciduous trees and shrubs also.

This grafting method can be used from mid-May through September in Texas. In addition to stocks and scions, a sharp knife with a stockman's blade, strips of rubber innertube or polyethylene budding tape and polyethylene squares are needed. The stock should be at least 1 inch in diameter at the point of union. Scionwood must be the current season's growth. Scions can be stored in an ice chest for up to 5 days without damage if they are kept moist and cool. Place a bag of ice cubes in one corner of the chest to keep the scions in good condition.

Fig. 1. Use current season's growth to cut scions, which are the small branches of the desired variety that will be grafted onto a larger piece of the living stock plant. Stock plants are seedlings which are not likely to bear quality fruit or nuts unless they are grafted.

To start, choose a suitable bud on a small branch and make a sloping cut ½ inch below the base of the leaf.



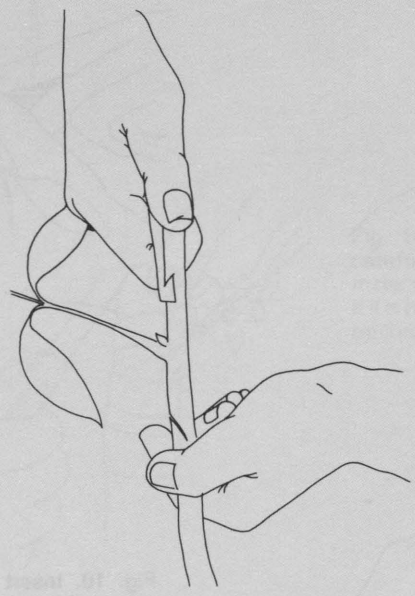


Fig. 2. Next, make a sloping cut ½ inch above the bud.

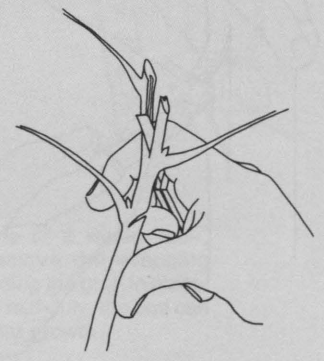


Fig. 3. Beginning at the top or apical end of the branch, cut out the scion. Use a "rocking" motion of the knife rather than a forced split.

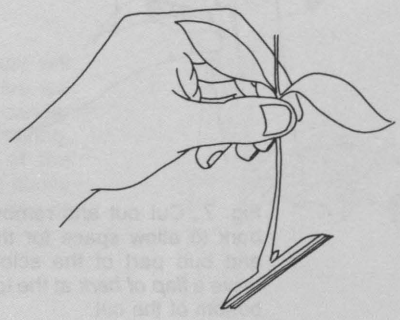


Fig. 4. Now the scion from the desired variety is ready to be fitted to the stock seedling.

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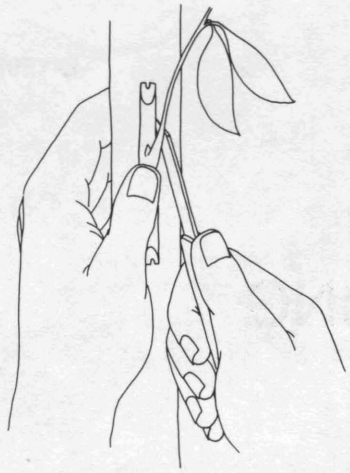


Fig. 5. With a knife or ball point pen, lightly trace the outline of the scion on the bark of the stock tree. Mark the space needed for the base of the leaf and bud portion of the scion.

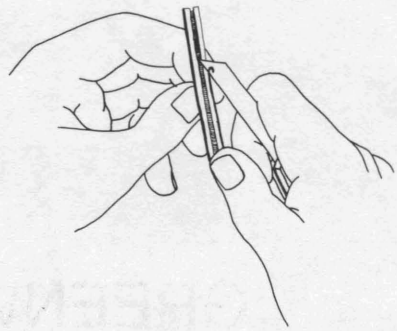
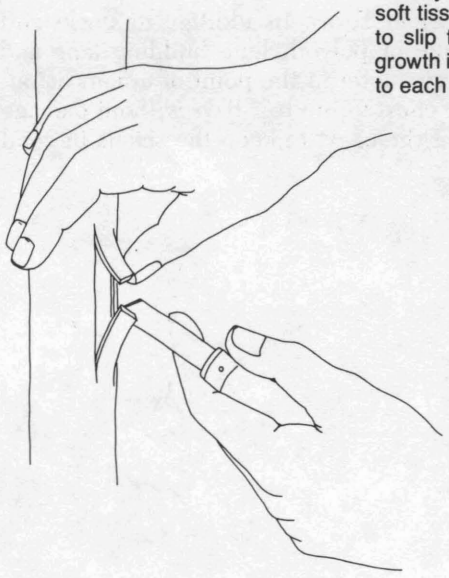


Fig. 8. Trim the sides of the scion almost to its cambium. Freshen the sloping cuts by removing a thin shaving.

Fig. 6. Following the traced outline, cut through the bark to the cambium, which is a thin layer of tissue just below the bark. It is the soft tissue of the cambium that allows the bark to slip from the wood and it is the region of growth in trees. Make sure the cuts are parallel to each other on the bark and at the cambium.



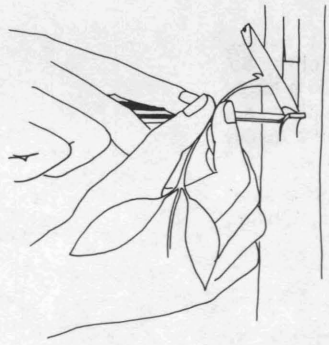


Fig. 9. Raise the bottom flap and insert the bottom of the scion.

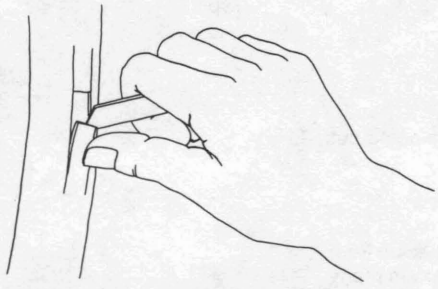


Fig. 7. Cut out and remove the bark to allow space for the leaf and bud part of the scion, but leave a *flap of bark* at the top and bottom of the cut.

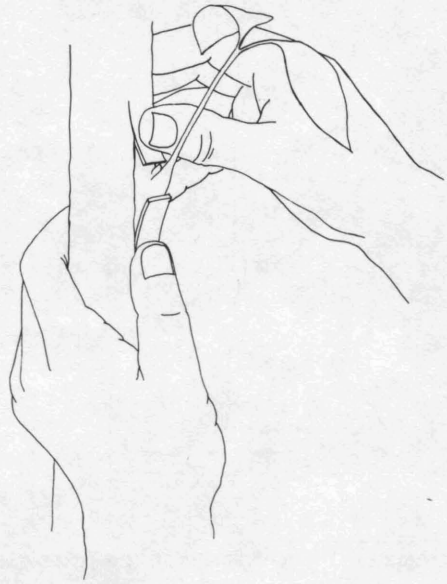


Fig. 10. Insert the top of scion under the top flap.

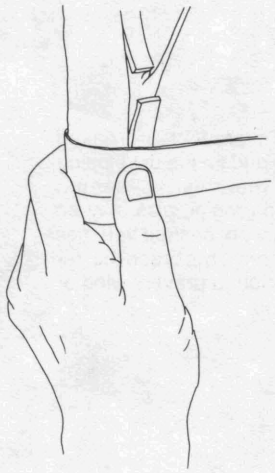


Fig. 11. Tie the scion in with a strip of bicycle or auto innertube or with polyethylene budding tape. Conventional rubber budding strips can be damaged by light and may break before the union "takes." See if the tie is firm, but do not use excessive pressure. When tying, make sure the upper and lower flaps of the stock are covered and remain in contact with the sloped cuts of the scion. These are the areas where callus from the stock and scion first unite. Side unions are slower.

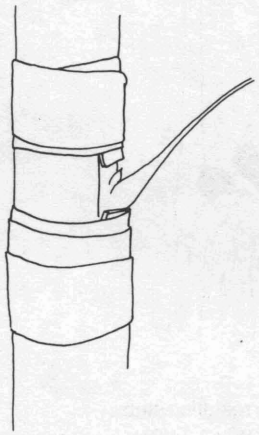


Fig. 12. Make sure all cut surfaces of the graft, including the ends of the bark flaps, are covered by the rubber strip or the budding tape. Keep the wrapping material off the bud and leaf base.

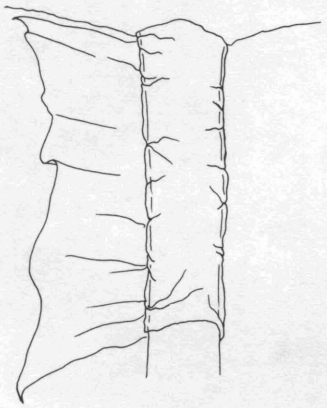


Figure 13. To help retain moisture, wrap the union with a polyethylene square. Make one and one-half turns.

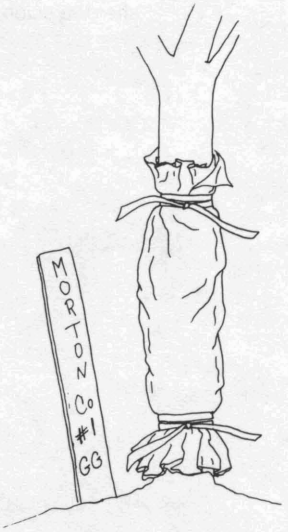


Fig. 14. Tie the ends of the polyethylene wrap with plastic budding tape or innertube strips. Label the graft.

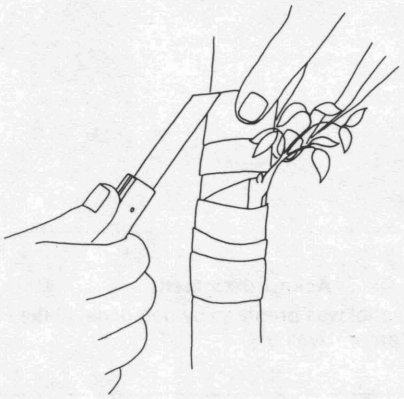


Fig. 16. One or 2 weeks later, carefully remove the wrapping material holding the graft in place. If it is before mid-July, the bud can be forced into growth.

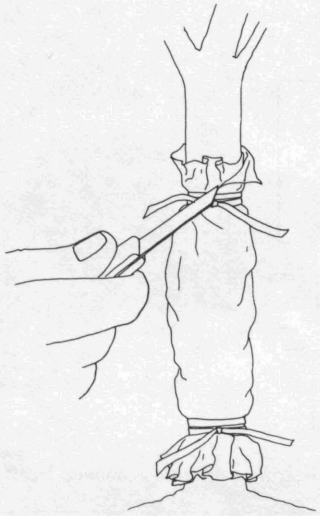


Fig. 15. After 21 days, remove the polyethylene wrap.

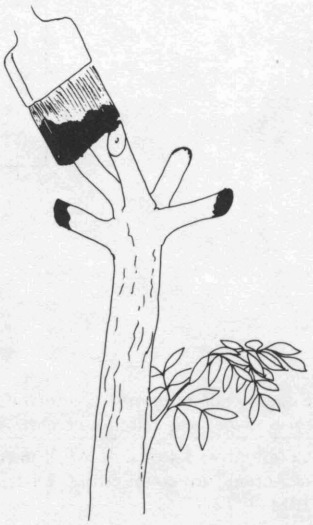


Fig. 17. Buds forced *after August* will seldom harden enough to survive fall frost. Do not force buds until all danger of frost has passed the following spring. Force growth from the buds of the grafted scion by cutting the stem above the union. Cover the wound with wax or grafting compound.

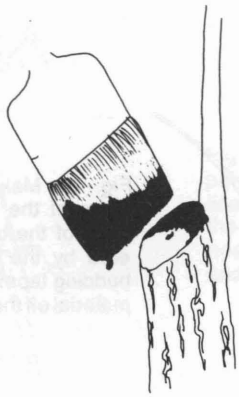


Fig. 18. Remove the resulting stub after the scion has grown 1 year.

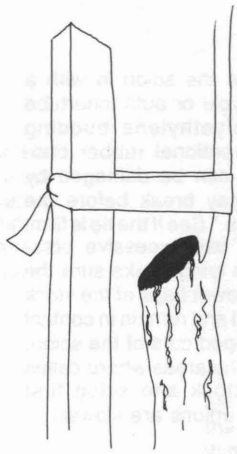


Fig. 19. To prevent a crooked tree, stake and tie the developing shoot to the desired shape. Greenwood grafting also may be used to topwork desired varieties onto large trees, but brace the developing scion to prevent wind or bird damage.

Acknowledgment

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