

Grafting in the Garden

Ann Evans, MGV 2016

There are many ways grafting can help the backyard gardener. Did you buy a Melrose apple tree only to realize that you're more of a Granny Smith person? Swap out the top of the tree with your new favorite. Are you desperate for home-grown apples, but have a postage-stamp-sized yard? Maximize cross pollination by adding another variety to your tree.¹ Did the deer take a chunk out of your tree's bark? It's not a death sentence -- grafting can save your tree's life!²

Types of Grafting

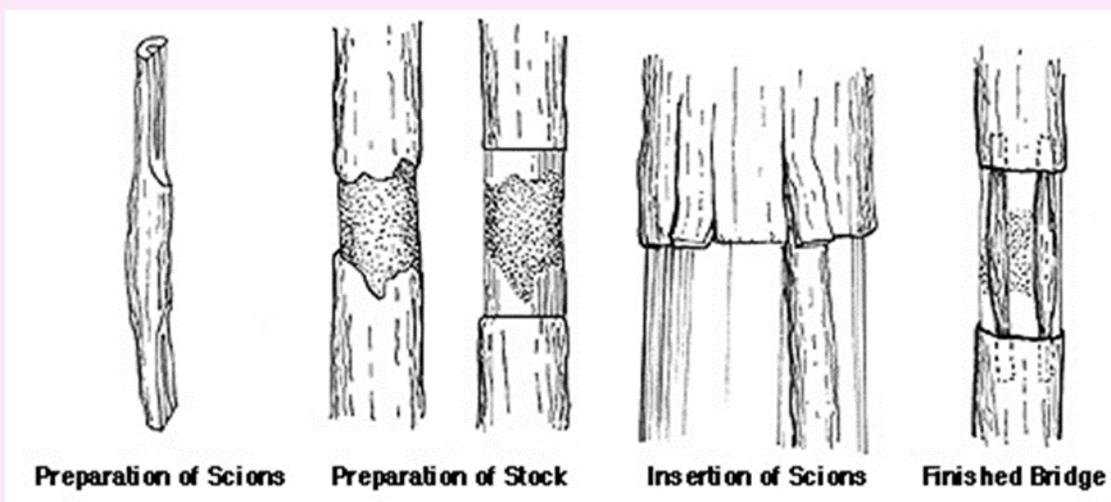
Extension sources divide grafting types into major categories based on the relative size of the scion (the part to be added) and the stock (either the rootstock or the existing tree). Where the scion and stock are both about the same size — about a pencil width each — methods like bench or whip and tongue grafting are best.³ When the stock is much bigger than the scion, cleft grafting is the procedure of choice.⁴ A third type of grafting, called bridge grafting, is used to repair damaged bark or strengthen graft connections.⁵ Finally, new varieties can be added to an existing plant by bud grafting.⁶

Grafting starts with equipment. You'll need a sharp, clean knife, plants in dormancy, grafting wax, grafting tape, and of course, suitable scions and stock.⁷ Always match up the cambium of the scion with the stock to ensure a proper flow of nutrients and fusing of wood.⁸

What to Graft

A general rule of thumb for grafting is that the closer the genetic relationship, the more successful grafts can potentially be.⁹ Many trees easily accept other varieties of the same species. Though riskier, grafts between two different species within the same genus are also possible.¹⁰

BRIDGE GRAFT





¹Knebush, Kurt, (2017, July). Turn Your Favorite Tree into Many, By Grafting. *The Ohio State University College of Food, Agricultural, and Environmental Sciences*. Retrieved from <https://cfaes.osu.edu/news/articles/turn-your-favorite-tree-many-by-grafting>.

²Bilderback, Ted (2014, June). Grafting and Budding Nursery Crop Plants. *North Carolina State Extension*. Retrieved from <https://content.ces.ncsu.edu/grafting-and-budding-nursery-crop-plants>.

³Crassweller, Robert M., Ph.D., (2017, October). Fruit Tree Propagation: Grafting and Budding. *Penn State Extension*. Retrieved from <https://extension.psu.edu/fruit-tree-propagation-grafting-and-budding>.

⁴Lord, William G and Oullette, Amy, (2017, March). Growing Fruit: Grafting Fruit Trees in the Home Orchard. *The University of New Hampshire Cooperative Extension*. Retrieved from https://extension.unh.edu/resources/files/Resource003733_Rep5323.pdf.

⁵Rothenberger, Ray R., and Starbuck, Christopher J. (2008, December). Grafting. *University of Missouri Extension*. Retrieved from <https://extension2.missouri.edu/g6971>.

⁶Knebush, Kurt, (2017, July). Turn Your Favorite Tree into Many, By Grafting. *The Ohio State University College of Food, Agricultural, and Environmental Sciences*. Retrieved from <https://cfaes.osu.edu/news/articles/turn-your-favorite-tree-many-by-grafting>.

⁷Bilderback, Ted (2014, June). Grafting and Budding Nursery Crop Plants. *North Carolina State Extension*. Retrieved from <https://content.ces.ncsu.edu/grafting-and-budding-nursery-crop-plants>.

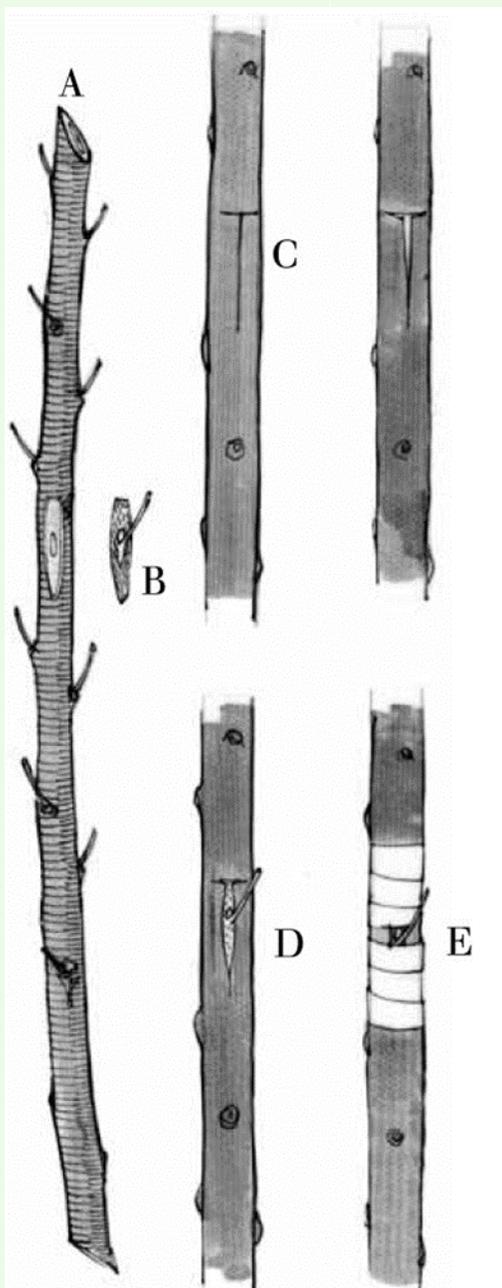
⁸Crassweller, Robert M., Ph.D., (2017, October). Fruit Tree Propagation: Grafting and Budding. *Penn State Extension*. Retrieved from <https://extension.psu.edu/fruit-tree-propagation-grafting-and-budding>.

⁹Rothenberger, Ray R., and Starbuck, Christopher J. (2008, December). Grafting. *University of Missouri Extension*. Retrieved from <https://extension2.missouri.edu/g6971>.

¹⁰Id.

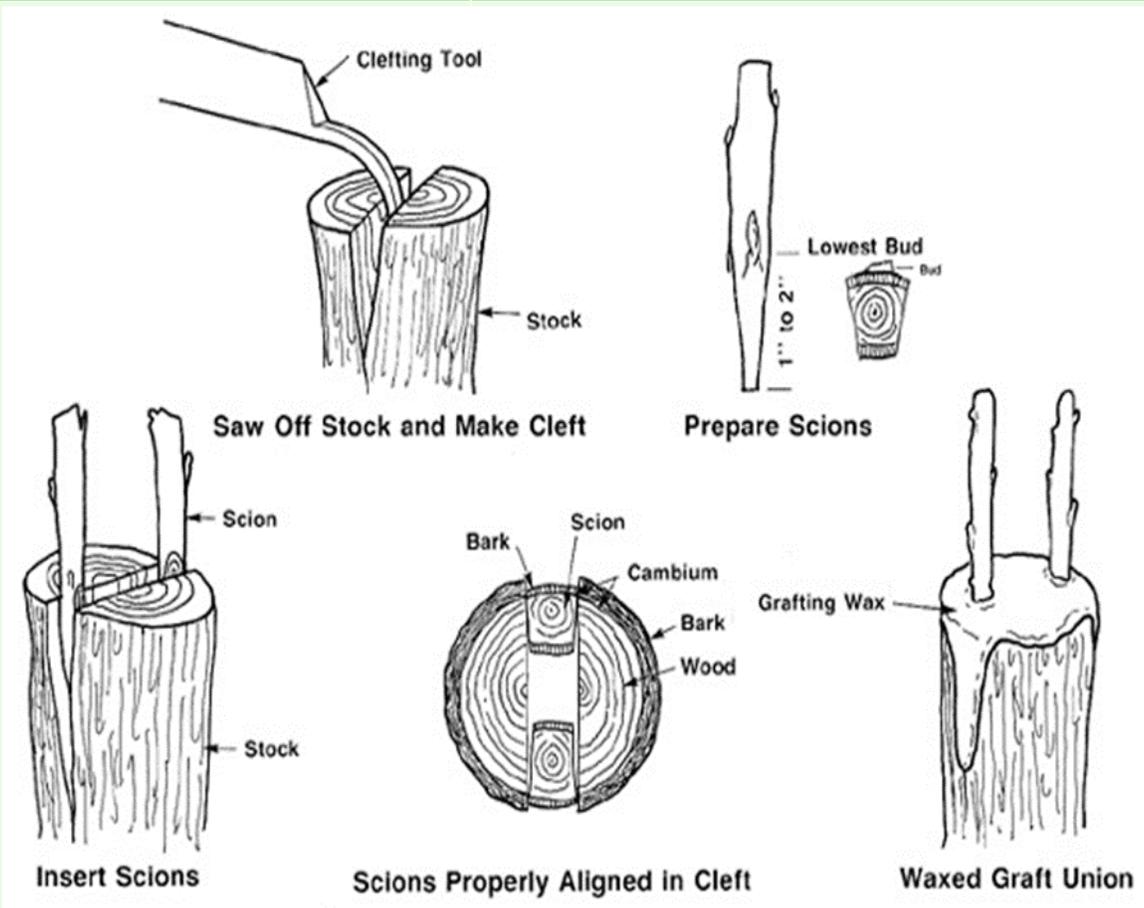


BUD GRAFT





CLEFT GRAFTS



BENCH OR WHIP and TONGUE GRAFT

While experimentation is a sweet seductress, remember that grafting involves wounding your plants, creating potential opportunities for infection. Best practice is to research scientifically-proven successful varietal pairings before making the cut.

Happy cutting!!

