

EXTENSION NOTES



from **Rebecca Konopka**
Carter County Extension Office
Agriculture & Natural Resources
carter.ca.uky.edu

Grafting: A Revolutionary Technique for Fruit Tree Cultivation

As gardening enthusiasts seek more productive and resilient fruit trees, grafting has emerged as a game-changer in horticulture. This age-old technique, which involves joining two plant parts to grow as one, has gained popularity for its ability to combine desirable traits from different plants, resulting in healthier and more fruitful trees.

Grafting involves the careful joining of a scion (a young shoot or twig of a plant) and a rootstock (the lower part of the plant that includes the root system). The process begins with selecting compatible scion and rootstock species. The scion is typically chosen for its superior fruit quality, while the rootstock is selected for its disease resistance, hardiness, and adaptability to soil conditions.

The scion and rootstock are precisely cut to match their vascular tissues, which are then bound together with grafting tape. This ensures the alignment of the cambium layers, the part of the plant responsible for growth. With proper care and environmental conditions, the two parts fuse, allowing nutrients and water to flow seamlessly, fostering the growth of a new, productive tree. Due to this required precision home gardener grafting often fails. Unless you are trying to preserve a favorite tree, it may be better to purchase a tree that has already been successfully grafted from a reliable nursery or greenhouse.

Commercially grown fruit trees are grafted because of these benefits:

- **Disease Resistance:** Grafting allows the combination of a disease-resistant rootstock with a high-quality fruit-bearing scion, reducing the risk of pest and disease issues.
- **Improved Fruit Quality:** Gardeners can graft scions from trees known for producing superior fruits, ensuring a higher yield of top-quality produce.
- **Space Efficiency:** Dwarf rootstocks can be used to control the size of the tree, making it possible to grow fruit trees in smaller gardens or even containers.
- **Genetic Diversity:** Grafting preserves genetic diversity by allowing the propagation of varieties that may not reproduce true to type through seeds.

The Carter County Extension Office is currently taking orders for apple and pear rootstock. Order forms are available online at <https://carter.ca.uky.edu/rootstock2025> and at the Extension Office. A limited amount is available so orders will be taken until February 3rd or until sold out. All rootstock will need to be picked up at the Extension Office around the first week of March. Gardeners will need to provide their own scion wood.

For more information contact your Carter County Cooperative Extension Service. Educational programs of the Cooperative Extension Service serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation,

January 28, 2025

gender identity, gender expressions, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability.

Upcoming Events:

- **Small Ruminant Quality Assurance** – Friday, January 24th @ 10:00 AM – Call 474-6686 to register.
- **Northeast Area Livestock Association** – Tuesday, January 28th @ 6:00 PM – Topic: - Cattle Traceability Rule & Electronic Identification Tags
- **Extension District Board** – Friday, January 31st @ 10:00 AM