

COOPERATIVE  
EXTENSION  
SERVICE



College of Agriculture,  
Food and Environment

[extension.ca.uky.edu](http://extension.ca.uky.edu)

# EXTENDING KNOWLEDGE *Changing Lives*



Contact:

Department of Horticulture  
N-318 Ag Sciences Center  
Lexington, KY 40546-0091  
Phone: 859 257-2909

<http://www.uky.edu/hort/>

When you support Extension, growers learn to graft apple trees enabling them to economically establish their own orchards with improved, disease resistant and heritage varieties.



*Using dwarf rootstock makes harvesting easier.*

## Extension Tree Grafting Workshops Benefit Home and Commercial Orchards

*I would not be farming without Extension. In the past two years I have grafted over 1,000 trees with a 95% success rate.*

*Larry Ayers*

*Ayers Family Orchards, Owen County*



The Orchard Production series, offered in Bullitt County, resulted in a 42% reduction in chemical usage and improved fruit quality. Eleven percent of participants developed a home-based business related to fruit production and credit their 14% increase in profits to utilizing techniques learned from the Extension programs.

*Kentucky Extension Reporting System, 2015*

In Appalachia, and across Kentucky families have maintained home fruit orchards to enhance their diets for decades. Although they enjoy raising fruit, the majority still need basic information and knowledge about new invasive pests to be successful with fruit production.

Fruit tree grafting was practiced and relied upon by orchardist as a way to continue to inexpensively increase their selection of varieties and orchard size until mid-1900. After this period, custom grafting was provided by large fruit wholesale companies and the art of fruit tree grafting declined. Home and commercial growers were limited to the varieties provided at nurseries and mail order companies. To maintain heritage varieties and introduce new disease resistant varieties, fruit tree grafting workshops were conducted by Cooperative Extension professionals in more than 15 counties during 2015. Hundreds of these disease resistant varieties have been planted making home and commercial growing of apples less pesticide dependent.

University of Kentucky Extension specialists and county agents teach about fruit tree culture and pest control at workshops. Workshop topics include: spray programs and techniques to reduce pest pressure enabling the production of quality fruit for both commercial and home producers. Apple tree-grafting workshops (<https://youtu.be/kYgMEEPq9I4>) allow many clients to propagate disease resistant varieties on disease resistant dwarf and semi-dwarf rootstocks, enabling them to



*A cleft graft of a disease resistant variety made into an established apple tree enabling the production of more than one variety from a tree.*

propagate improved varieties which enhance their marketability as well as to propagate old family heirloom varieties that they may not be able to identify or find at nurseries.

The **Campbell County** Extension Service has established a demonstration fruit orchard at The Giving Fields located in Melbourne, Kentucky. The apple planting is made up exclusively of disease resistant trees in their fifth growing season. Over 300 trees of seven disease resistant cultivars are planted. These trees are now of the age that scion wood for grafting may be cut from the varieties for which the patent has expired.

According to the 2012 Ag Census, Kentucky has 554 farms growing apples on 962 acres. Kentucky apples are sold primarily through retail marketing at a higher value. University researchers and Extension specialists conduct on-going research at the UK Horticulture Research Farm in Lexington and the UK Research and Education Center in Princeton, Kentucky.