



# HortReport

*Cooperative Extension Capital Region*

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## Artistic Culture of Fruit Trees in the Home Landscape

Many of us still visualize a backyard apple tree as one that provides shade on a hot summer day or requires a ladder when it is time to harvest the fruit in the fall. For many years, the standard commercial orchard was also this stature—trees 25 to 30 feet in height planted at 40 by 40 foot spacings.

In fruit growing regions throughout the world, the scale of orchards has changed, however. Most fruit growers are finding it necessary to increase management efficiency on smaller acreage and to reduce or change labor requirements. Orchards that were planted at densities of 40 to 50 trees per acre have been replaced with blocks planted with 200 to 2000 trees per acre. Even higher densities have been evaluated in research trials or utilized in commercial plantings of high-value cultivars. These changes have been made possible by the introduction of trees that are dwarfed, either by grafting to a size-restricting rootstock or by selection of varietal strains that are genetically more compact.

Dwarf fruit trees are ideal for the home landscape, especially if space is limited. In Europe where many high density commercial systems originated, formal orchards are common around historic buildings and home gardens. Fruit trees are frequently trained along fences, walls and walkways or in interesting individual shapes and designs.

Artistic fruit tree designs for formal orchards are of three general shapes. The most common design is a two-dimensional “living wall” of trees (espalier) trained to a palmette. Support such as a trellis or wall is generally provided. The advantage of a wall is that it lends protection as well as support. Fruit trees can also be trained to a one-dimensional form, such as a cordon. In this system, a “single stem” is trained on a stake or wires to be horizontal, vertical or oblique. A third artistic training design is three-dimensional.

Depending on the shape, stake, wire or bamboo support may be needed. Common forms are the goblet, the table and the pyramid.

Dwarf apple and pear trees have the best natural growth habit for most espaliers and three-dimensional forms. Slow growing apple varieties on Bud.9 or M.9 rootstocks are well suited to cordon systems. Peaches and plums are more vigorous and should be trained to a less structured form such as a fan palmette.

Practices applied in a formal orchard are similar to those employed in a standard orchard. A basic understanding of the art and science of growing fruit trees is required. One important difference is that the trees can be pruned a little each time you take a walk in your garden. With constant observation and attention, formal fruit orchards are easier to maintain in the desired artistic forms.



Espaliered apple tree with branches trained to an oblique palmette.



Pear trees trained to U form (Verrier) palmettes and vertical cordons.



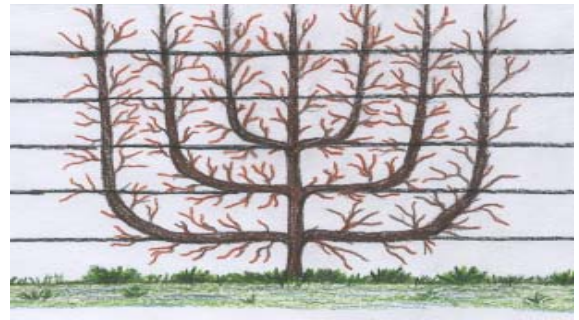
Individual apple tree trained to a table form.



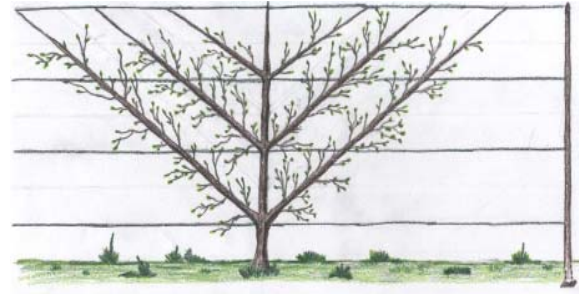
“Living wall” of horizontal palmette apple trees.



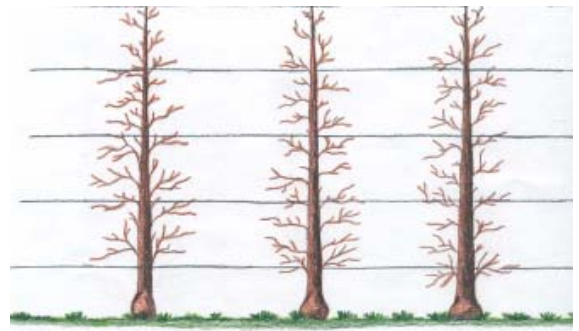
Two apple trees forming an attractive arch.



Verrier palmette



Oblique palmette



Vertical cordons

By: Tara A. Baugher, Regional Tree Fruit  
Extension Educator

*Photographs taken in formal orchard at East Malling  
Research Station, England*

**References:**

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Black, R. and T. Yeager. 1993. *Espaliers*. Univ. of FL Cooperative Extension Service: Circular 627.

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