

Combining Gardening Art and Science **Espalier**

The term **espalier** refers to any plant grown in a flat, two-dimensional pattern — essentially making trees and shrubs behave as vines. The Espalier classic pruning style dates back to 16th and 17th century Europe. Espaliers, like vines, are grown against a wall, a trellis or a freestanding structure of posts and wires. In a home garden, they require little space, and they can add a strong focal point, define a garden space, or serve as a living fence. Unlike vines, espaliers are not a quick, instant solution to a landscaping problem. They grow slowly and require careful training and pruning. However, an espalier rewards the gardener with an abundance of flowers and fruit and the decorative pattern of its branches can be enjoyed throughout the seasons.

Espaliers Patterns

Espaliers are usually trained to grow in traditional, formal patterns that have evolved over many years. When choosing a pattern for an espalier, the gardener should consider the intended purpose of the espalier, the plant material and the gardener's confidence and abilities.

Cordons

Cordons are best used as a decorative treatment against walls, as a fence or as a divider between areas of the garden. The following patterns are the most common and most versatile cordon designs.

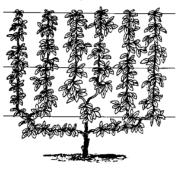


Horizontal Cordon

- The simplest and easiest espalier for a beginner is the vertical cordon. This pattern uses a single, upright plant spaced at 1 to 3 foot intervals.
- A simple variation is the diagonal cordon.
 In this pattern, the upright plants are trained to grow at a 45-degree angle.
- Another variation of the vertical cordon is the horizontal cordon in which two branches are trained in opposite directions from a central stem.

Candelabra

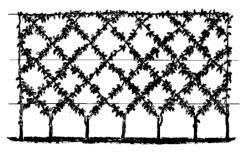
A more dramatic espalier pattern is the candelabra. This pattern develops when plants are grown from a single trunk and branch into an upward-pointing U shape. Candelabras can be a single U, a double U or a triple U. This pattern is best used as a focal point in the garden.



Candelabra

Belgian fence

One of the most striking espalier patterns is the Belgian fence. This pattern forms a diagonal latticework. Originally, this pattern was developed specifically for apple and pear trees, but it can be used with other plants. Traditionally, plants are trained to grow at a 45-degree angle using only two shoots that form a Y. Eventually the plants will overlap one another and with some plants, the stems graft together so that the espalier becomes self-supporting.



Belgian Fence

Supports

Like vines, espaliered plants can be grown directly on walls. In most cases, espaliered trees and shrubs require a support or scaffold for training. The support can be made of wood or wood and wire. On brick, stone or concrete walls, the support can be made of horizontal wires attached to eyebolts. It is advisable to leave 4 to 6 inches between the espalier and the wall in order to promote air circulation, reduce the chances of disease and allow room for tying and pruning.

Training

Training an espalier is just like training any other plant. Use heading cuts into young wood to stimulate branching. Remember, a new shoot will form in the same direction that a bud on the branch is currently facing. Heading cuts should be slanted and about ¼ inch above a bud. Use thinning cuts when removing unwanted growth. Pruning can be done at any time during the growing season to remove dead, broken, diseased or crossing branches. Branches that do not contribute to the design should also be removed. One caution — the gardener must know how a particular plant will respond to pruning as well as the plant's specific growth, flowering and fruiting habits.

Selecting a Plant

The most common plants used for espalier are dwarf fruit trees. However, there are many other species that can be trained quite successfully. Here are some suggestions to get you started.

Edible Fruit		Flowers		Foliage and Form
Apple	Peach	Crabapples	Forsythia	Cotoneaster
Apricot	Sweet Cherry	Eastern Redbud	Magnolia	Hollies
Nectarine	Sour Cherry	Flowering Cherry	Pyracantha	Japanese Maples
Pear	·	Flowering Quince	Viburnums	Yews

"Kansas State University Agricultural Experiment Station and Cooperative Extension Service"

K-State Research and Extension is committed to making its services, activities, and programs accessible to all participants. If you have special requirements due to a physical, vision, or hearing disability, please contact Johnson County Extension at 913.715.7000. K-State Research and Extension is an equal opportunity provider and employer.

Rev. 2022