



MULTIPLE FRUIT TREE BED PLANTING

JUST FRUITS & EXOTICS

30 ST. FRANCES ST.

CRAWFORDVILLE FL 32327

OFFICE: 850-926-5644 FAX: 850-926-9885

JUSTFRUITS@HOTMAIL.COM

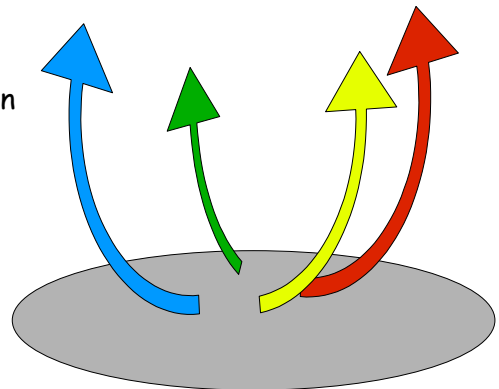
WWW.JUSTFRUITSANDEXOTICS.COM

It has long been standard practice in orchards to space most fruit trees fifteen to twenty feet apart. This allows plenty of sunlight for every tree, to promote fruit development, and good air circulation, to discourage disease and pest buildup. This is fine for people with a lot of space, but what about the small-space urban fruit grower? Is all that space really required? Can people with postage-stamp-size back yards grow a wide range of fruits? It's time we take a new look at how we plant our backyard orchards.

In nature, you never find trees growing in straight, well spaced rows; rather, it's a beautiful tapestry of coexistence. What looks like a random tangle is really a neighborhood of many plants, sharing the same piece of earth and sun space. Through time, this community of plants works it out; while twining and stretching to reach the sun, everyone in the community finds a place to coexist. It's true that over time some plants will give way and die as more dominant species take over. But what happens when plants with the same growth habits are found coexisting? They often will colonize into a well balanced, long-lived thicket. We can take this observation and adapt it for application in a small space orchard; we learn that plants with the same ultimate heights and growth pattern will colonize well with one another for sun, and that plants that like the same soil conditions (soil PH, moisture content) will cohabit in the same soil.

THE MULTIPLE PLANT BED APPROACH

We can put all this to practical use in the planting of multiple plants close together. To be successful with this style, it is important to group trees that will cohabit well with one another. This works best when plants of like species are planted together. For example, planting four peach trees together that ripen at different times is an especially useful way to extend the fruiting season and save some space (see drawing 1). This also works with trees that need cross-pollination, like pear and apple, serving the purpose of extending the fruiting season as well as getting the pollination issue resolved. When preparing tree beds select a 10-15 foot area for beds containing 3-4 trees.



Drawing 1: Plants of ultimate heights and growth patterns will colonize well with each other

SPACING TREES WITHIN THE GROUP

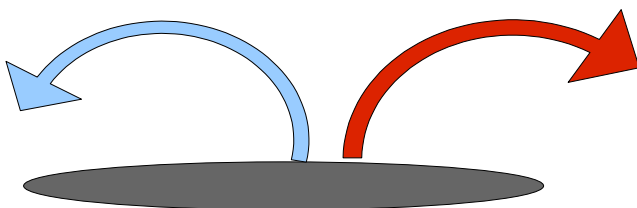
MULTIPLE TREE BEDS

To overcome the sun space issue it will be necessary to treat each tree planted in the group as if it were a branch on a multi trunked tree (see drawing 1). Multiple plantings of 3-4 trees work the best, as this allows good development of the canopy. Spacing within the tree group will depend on the vigor and type of fruit planted. Large trees like pecan and walnut will require more room between the plants, as opposed to smaller trees like peach and nectarine. Plants that sucker and spread like berries can be planted closer as they will all grow together over time. Consult the chart below to get some ideas on good plant spacing.

In order to maintain a healthy root zone in a grouping of trees, create a bed under the tree group that can be kept free of weeds and amended with organic material if needed. This area should be at least half the estimated size of the plants' future canopy. Maintaining a mulched bed under the entire canopy is best as this most mimics what is found in thriving wild colonies.

SPACING PLANTS WITHIN GROUPS			
<p>LARGE SIZE TREES SPACE 4 to 5 FEET APART</p> <ul style="list-style-type: none"> -Black Walnut -Chestnut -Mandarin Melon Berry -Mulberry -Pecan -Quince -Raisin Tree <p>VINE SPACE 1 to 2 FEET APART</p> <ul style="list-style-type: none"> -Kiwi -Grapes 	<p>MEDIUM SIZE TREES SPACE 3 to 4 FEET APART</p> <ul style="list-style-type: none"> -Apple -Large Citrus Oranges, Lemons, Limes, Tangerines and Grapefruit -Jujuba -Loquat -Mayhaw -Olive -Pawpaw -Peach -Pear -Persimmon -Plums 	<p>SMALL SIZE TREES and SHRUBS SPACE 2 to 3 FEET APART</p> <ul style="list-style-type: none"> -Banana -Pineapple Guava -Pomegranate -Small Citrus Kumquats, Limequats, Calamondine <p>BERRIES SPACE 1 to 2 FEET APART</p> <ul style="list-style-type: none"> -Blackberry -Blueberry -Elderberry -Goumi 	<p>HEDGE ROWS SPACE BETWEEN PLANTS</p> <ul style="list-style-type: none"> -Banana 3 feet -Blackberry 2 feet -Blueberry 3 feet -Large Citrus 5 feet -Small Citrus 3 feet -Elderberry 3 feet -Goumi 3 feet -Loquat 5 feet -Olives 5 feet -Pineapple Guava 5 feet

Drawing 2: Two vines in the hole are trained in opposite direct along the trellis



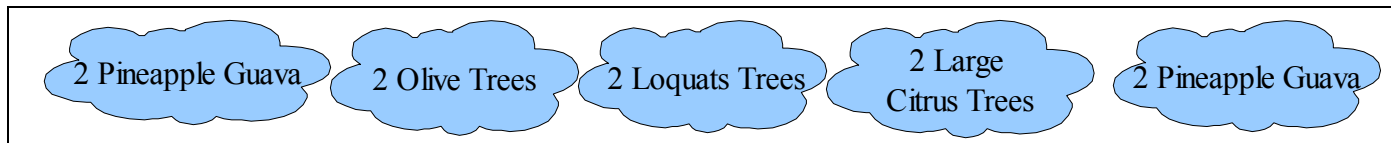
MULTIPLE PLANT VINE BEDS

The technique of planting 2 varieties of vining fruits like grape and kiwi in the same planting bed will work if vines are planted 2-3 feet apart and the trunk of each vine is trained to grow in the opposite direction along the trellis. Prepare at least a 4x6-8 foot bed to accommodate 2 vines

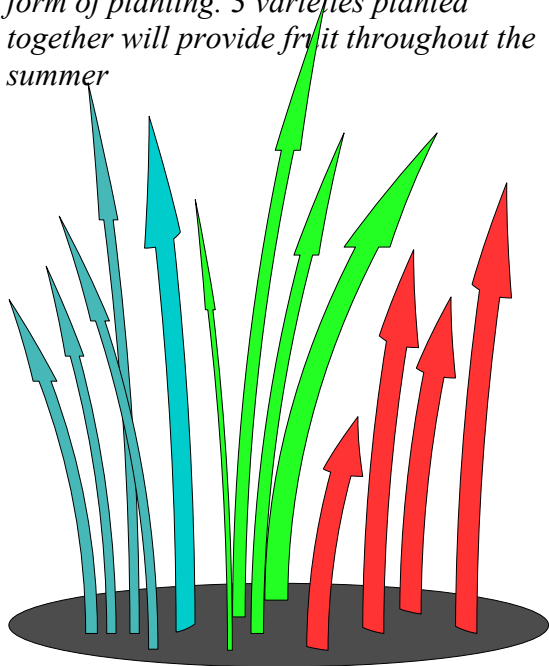
(see drawing 2).

MULTIPLE PLANT HEDGE ROWS

Many fruit trees are well suited for planting in hedge rows, when planted tightly together they form a lovely screen that works well in an edible landscape to block an unsightly view. Here's an example of a 50 foot long evergreen hedge of mixed fruit trees with plants on 5 foot centers



Drawing 3: Berries are well suited to this form of planting. 3 varieties planted together will provide fruit throughout the summer



MULTIPLE PLANT BERRY BEDS

Berry plants that produce suckers like blueberry and blackberry are especially well suited to this form of planting as the plants will readily grow over time into a multi caned clump of several varieties that will produce fruit throughout the season. Prepare at least a 4-6 foot bed that will accommodate 3-4 plants (see drawing 3).

PREPARING THE BED

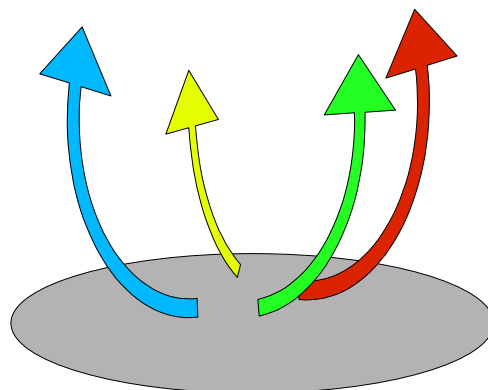
When planting multiple plants in a small area it is most important to maintain good soil nutrition. Test the soil PH of your planting area and adjust the top soil by tilling in lime or sulfur and iron to maintain the correct soil PH for the fruit you desire to grow. For poor sandy soils or tight clay soils it helps to amend the top soil in this area with a mixture of 2-4 inches of well

rotted manure, rotted hay or leaves for Lime Loving plants or 2-4 inches of peat moss, leaves, pine bark or hardwood bark for Acid Loving plants. Till your amendments thoroughly into the top 4-6 inches of your new planting bed, as this is the basis of creating a good top soil. Mulching the beds yearly in the spring will continue the soil building process and keep competition with weeds for water and fertilizer from taking place.

PLANTING and PRUNING

At planting angle the trunks in outward directions to allow the trees to find enough sun to nourish them (see drawing 4).

In addition to planting the trees correctly you will also need to maintain a life long system of pruning to insure the trees receive adequate sun and air flow. This



Drawing 4: At planting, angle the trunks in outward directions

encourages good fruiting as well as preventing fruits rots and pest build ups.

Developing a good structure on your tree grouping is extremely important to the longevity of the group. Vigorous, poorly trained trees within the group will quickly over come slower growing varieties in the group. It helps to know the growth habit of each variety to be able to properly maintain the trees health throughout it's life.

Try to plant trees with similar growth habits together. This is why combinations of different varieties of the same type of fruit work the best for this planting system.

In the training years, usually the 1st through 3rd year, the yearly pruning will consist of training the main trunks of the multiple trees in outward angles away from each other. This will ensure good sun space, while at the same time pruning out all wayward branches off that are attempting to grow into the middle and into the other trees sun spaces. Through time you will need to maintain good fruiting branches and control the height of the tree so easy fruit harvest will be possible.

SPACING GROUPS OF BEDS

Be sure to space your beds of multi planted fruit trees far enough apart to accommodate good canopy formation. This also allows for easy picking and movement throughout the tree groupings. For ideas on good spacing between the plantings see the "Group Spacing Chart" and the "Example Orchard" drawings to get ideas on proper orchard lay out.

GROUP SPACING CHART			
TREES AND SHRUBS	-Elderberry 8x8 -Goumi 8x8 -Jujuba 15x15 -Loquat 15x15 -Mandarin Melon Berry 20x20 -Mayhaw 15x15 -Mulberry 20x20 -Nectarine 15x15 ft. -Olive 15x15 -Peach 15x15 -Pear 20x20	-Pecan 30x30 -Persimmon 20x20 -Pineapple Guava 10x10 -Plums 15x15 -Pomegranate 10x10 -Quince 20x20 VINES THAT NEED TRELLIS BEDS -Boysenberry 10x15 -Kiwi 10 x 15 ft. -Grapes 10x15	HEDGE ROWED FRUIT -Blueberry 10xLength -Blackberry 10x Length -Large Citrus 15xLength -Small Citrus 10xLength -Loquat 15xLength -Olive 15xLength -Pineapple Guava 10xLength -Pomegranate 10xLength -Raspberry 10xLength

Example Orchard drawing 50x100 foot in size.

