Introduction

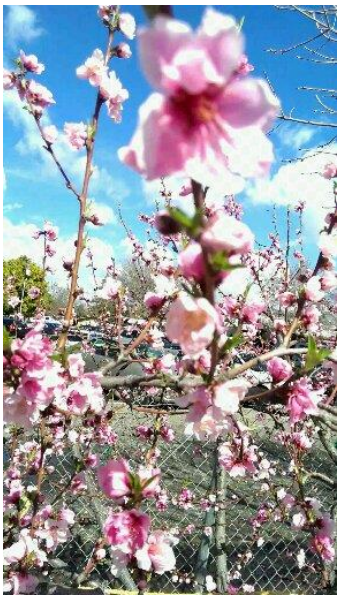
Fruits are best picked fresh from the tree, bush or bramble, and so easy to grow. But not all fruits are the same; some actually produce better than others. After reading this book you will have all the tips, tricks and techniques to grow your own backyard orchard. Have the canning supplies ready, because this will be the best harvest in years.

We'll cover: the best varieties, pollination, types that are self fruitful and which varieties produce better when planted with a buddy; the best planting techniques and staking methods, and how to water and feed fruiting plants for best production; and all these insider tips while keeping the produce organic right in your own landscape.

If you have tried in the past only to become frustrated at the lack of fruit, it probably is not your fault. This is especially true if using large box stores, Marts and warehouses to buy plants. Many plants through these outlets are sourced by managers in other areas, even other states and are wrong for your region. These plants are displayed for price alone and are usually very young, years away from producing their first fruits. You want a fruit tree that is at least 5-7 years old (of fruit age) for best backyard success, but I won't have to tell you that.

After reading this book, you will know as much as any master gardener on the art of growing better fruits, or at least have the resources to look up the knowledge needed to grow your own backyard orchard. Enjoy – fruit really is better when picked fresh from the tree. Plus, there is the added bonus of know exactly where your fruit has come from without the use of harmful chemicals, right from your own landscape.

How to Find the Perfect Tree on the Lot



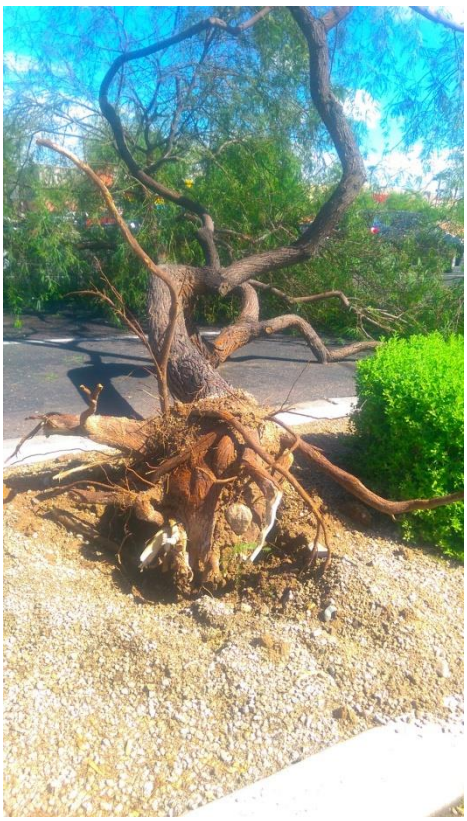
Choosing the correct tree variety is crucial if you want consistent fruit at Prescott's mile-high altitude. We have found over the years that some fruit trees and vines, when planted in these alkaline soils and low humidity, produce more prolifically or have a better flavor than others do.

A healthy fruit tree will be 5-7 years old before producing its first crop, becoming more prolific with maturity. Unfortunately, garden center trees aren't labeled with their ages or when they are likely to produce substantial crops. It can pay to ask for help from nursery professionals.

When shopping for a fruit tree, ask lots of questions of the horticulturalist as well as performing your own verification check: look at the girth of the trunk; the thicker the trunk the more mature the tree. Stay away from "whips" – trees in their early stages. These immature trees will not have the strong branch structures that define the shapes of mature trees.

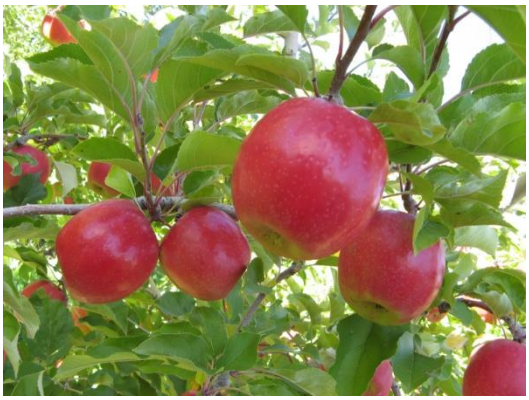
It's smart to handpick each and every tree to be planted in a landscape. Most people only plant a few trees on the average property because each one is a considerable investment. Trees are slow to grow into their eventual sizes and intended purposes, so buy the largest size your budget allows. This is true for shade, privacy, accent, and fruiting trees. Buy a more mature tree and see your landscape vision come true.

Avoid Bare Roots



Another factor to avoid is a bare root plant. The definition of a bare root plant is one that has been grown in a field, lifted from that field with no dirt left clinging to its roots, and shipped to market in that condition; hence the label “bare root” plant. This process is hard on the plant and is reflected in the extremely high failure rate with this type of planting.

As you might suspect, cost has been the reason for marketing these naked plants. However, even including shipping costs from distant farms, there isn’t much price difference between a bare root tree and a fully rooted tree from a local farm. This is especially true considering bare root plants are three to five years behind the development of their fully rooted counterparts, causing the first fruiting season to be years behind as well.



***Mountain Gardener Tip**: The varieties below are my favorites for our climate. I have had personal success with these varieties and love their local flavors. These are by no means the only fruits you can grow here, but the listing is a good starting point of selections.*

All-in-One Almond	*Tilton Apricot*
Anna Apple	*Fuji Apple*
Redhaven Peach	*Gleason Alberta Peach*
Satsuma Plum	*Burgundy Japanese Plum*
Bartlett Pear	*Comice Pear*
Hosui Asian Pear	*Niagara Grape*
Heritage Raspberry	*Black Satin Blackberry*

When and How to Plant

Just as soon as soil can be seen peeking through our snowy landscape it is time to get new fruit trees into the ground. It also is the time to plant grapes and most berry-producing vines. That's why local garden centers have good selections of these fruit producing plants in late winter/early spring.

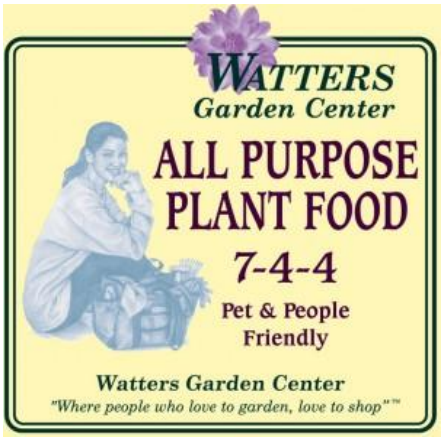
Find the Perfect Place

Common sense can direct you in choosing where to plant fruit trees. If your home is built on an elevation, choose the uphill side of the property if possible. Stay away from creeks and drainage areas. The reason is simple: cold air sinks and follows the natural drainage of the land. You are at less risk of frost damage to spring bloom if trees are planted uphill.

Mountain Gardener Tip: *It is important to know that a tree grown in mountain clay soil does not send down a typical taproot. Instead it sends out a bent growth that I call a "hockey stick root." This root will send out runners just under the surface of the soil in order to absorb rain and nutrients from our area's sporadic rainfall. Because we know this is how the root is going to grow, it only makes sense to give it a hole that is wide but no deeper than the current root ball. My rule of thumb is a hole that is the same depth as the root ball, but three times the width of the roots in the container.*

Proper Planting

Remove any rocks and debris that are larger than a golf ball and amend the excavated soil with composted mulch, using one shovel of mulch to three shovels of native earth. At this time, it is good to add a natural fertilizer, too. To save time, blend the soil, mulch, and plant food into a single planting medium.



Mountain Gardener Tip: *For the fertilizer, I suggest "Watters All Natural Plant Food 7-4-4;" it is the perfect blend of nutrients to encourage leaf growth which in turn will bring on a hardy root system.*

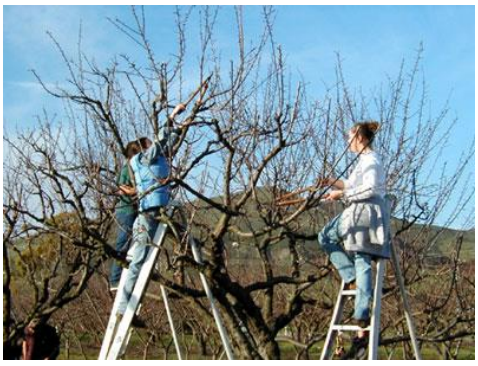
Using your foot, pack down this nutrient rich soil firmly around your newly planted tree so there are no air pockets remaining around the root ball. Water the tree thoroughly with a mixture of water and a rooting hormone that encourages new root hairs to form right away and results in a strong, well-established plant before the stressful effects of summer heat.

The final planting instruction is to stake. Each new tree requires two stakes, one on either side of the root ball.

> ***Mountain Gardener Tip:*** *Use one of my specially designed 'V-straps' to secure the tree to the stakes. They allow the tree to move and sway with the wind, but never to snap in two.*

Pruning

Here is a tree-planting postscript: To top off or not to top off the top of the tree. Previously, gardeners were advised to cut most of the branches off of newly planted fruit trees so that the existing root system could better handle the reduced leaf mass. That is no longer the accepted thought because it takes many



leaves to create the photosynthesis that produces more aggressive roots. The more leaves you have on a new tree, the better the rooting process will be in the first year. Do NOT top your trees; it makes for weaker plants.

Getting the Right Variety for a Bountiful Harvest

Late-blooming apple, pear, peach, cherry, nectarine, and apricot trees all produce well in the mountains of Arizona. The soft fruit trees most likely to bloom first are apricots, then nectarines, followed by peaches, cherries, and plums. Apples and pears are the last fruit trees to bloom in spring, which means they are at least risk of frost damaging the blossoms. This is the reason they set fruit more often than other fruit trees.

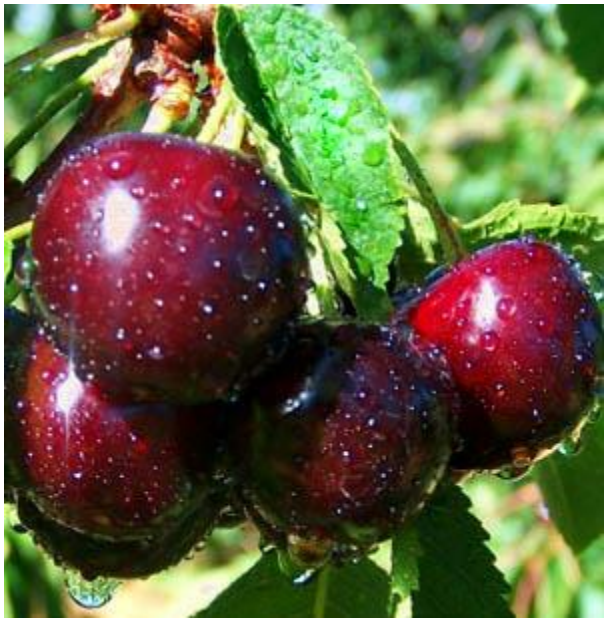
Fruit trees produce better when planted in pairs. Many trees are self-fruitful or self-pollinating, but even these trees produce better crops when planted within 100 feet of a similar tree. Cross pollination is essential for apples, pears, cherry and plums. The same variety of tree will not pollinate itself, but requires a different variety to pollinate with. For example, Fuji apple will not pollinate another Fuji apple, a Comice pear will not pollinate another Comice pear and so on. Likewise, other fruit tree varieties will not pollinate genetically different fruits. Apples only pollinate apples, pears only pollinate pears, plums only pollinate plums and so on. It is best to plant a completely different variety of tree, but still in the same fruiting species. **The charts in the appendix on page 11 explain which varieties can be cross-pollinated.**

Pitted fruits produce well without pollination from another tree. For trees that do take two, they can be planted anywhere on your property and still pollinate each other. Bees help pollinate trees even from a neighbor's yard.

***Mountain Gardener Tip**: If you don't know where to begin a home orchard, start with either*

apples or pears. Apple trees are the very last fruit trees to bloom in spring, so there is less likelihood of a late frost zapping their fruits. Pear trees are right in sync with apples' bloom cycles and consistently produce fruit year after year. Some examples of good local fruiting apples are both red and golden Delicious, Fuji, Granny Smith, and my personal favorite, 'Pink Lady'. Late blooming pears are Comice, Bartlett, Seckel and the spicy Asian pear.

Apricots are the very first fruit trees to bloom each spring. Frustratingly, apricots are a "feast or famine" kind of tree. Either you have so many fruits you can never process the entire harvest, or the frost takes them all. However, the most consistent local apricot harvests come off the Moorpark and Chinese varieties.



Right after apples and pears, peach and cherry trees have the next most consistent harvests year-after-year. Most years these pitted fruits skirt spring frost and produce very heavy crops. Peaches can produce such heavy crops that branches break right off the tree under the strain. A neighbor in Prescott Valley had his entire tree "jump" out of the ground under the weight of hundreds and hundreds pounds of fruit!

Locally, most consistent peach harvests come off the Red-haven, Reliance, and O-Henry trees, and my favorite white peach, the Arctic Supreme. The best sweet cherries are picked from both Lapin and Stella trees, and for a dessert variety turn to the ever-popular Montmorency.

Just as the peach and cherry trees begin to bloom,

the nectarine, plum, and prune plums are finished pollinating and their fruits set. For our higher elevations, it is imperative to buy the latest blooming varieties of these soft fruits. The best producing plums are the Santa Rosa, Satsuma, Elephant Heart, and the Ozark Premier. The nectarines best suited for local landscapes are the Fantasia and the melt-in-your-mouth Sunset red.

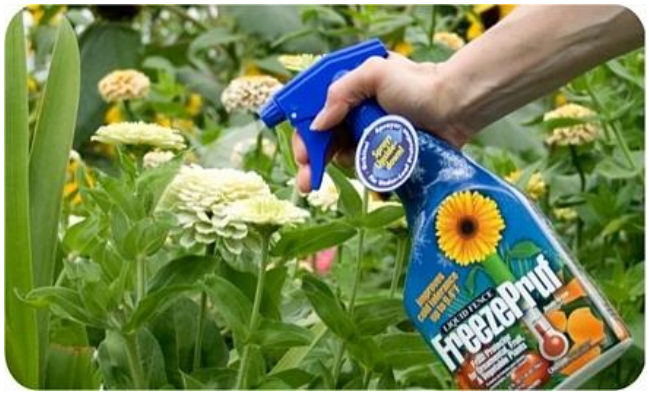
Protecting Fruit Trees from the Elements

The central highlands of Arizona are notorious for lulling fruit trees into blooming early and then damaging the fruit with a late April storm. There are a number of traditional ways to try to protect your fruit blossoms.

The magic number for frost damage is 27 degrees. If the air around a fruit tree in bloom reaches 27 degrees, all blossoms will be damaged and fruit will not set. The tree will be fine, but that year's fruit will be lost.

If frost is expected and fruit trees are in bloom, cover them with a sheet with a shop light under the sheet and you will avert fruit loss. Also, Christmas lights with the larger C-7 or C-9 size bulbs strung through the branches will throw off enough warmth to protect most blossoms. The neighbors may think you are crazy for having your Christmas lights still on in March or April, but when you share that first peach cobbler with them in July, they'll understand that you're really on top of things.

Mountain Gardener Tip: *You can protect your blossoms and your plants' natural cold tolerance to 2° to 9°F with a product called FreezePruf. Developed by botanists, FreezePruf protects the plant externally and internally by enhancing both its natural antifreeze-like properties and its ability to survive ice crystal damage. The biodegradable formula is designed to resist washing away by rain or snow and the*



application lasts up to 4 weeks with normal precipitation.

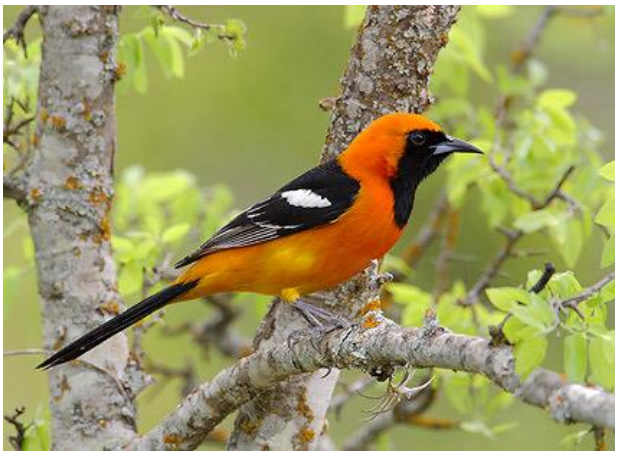
Protecting Fruit Trees from Pests & Birds

All fruit trees need protection from birds and pests. Fortunately, a little 'insurance' goes a long way to guarantee that you will enjoy your blockbuster harvests. If you don't want your fruit to go the way of Hitchcock's "The Birds," put into practice the good suggestions below. All of the methods are tried 'n' true and easy to employ.

Anti-bird methods abound, whether pie pans dangling from limbs or red glass Christmas balls hung from the tree with care, and most of these deterrents are effective. However, none works as well as wrapping each tree in bird netting. This one-inch-square mesh plastic netting is highly effective on newer trees and on semi-dwarf varieties and smaller.

If you have large trees straining under bumper crops, you'll need to turn to bird tape. This flexible foiled tape glitters in the sun with apple red painted on one side and spaceship silver on the other. As the wind flutters the tape strands in the trees, the birds are too nervous to eat very many fruits. It scares off birds before they eat too much, reducing the number of fruits damaged.

Scarecrows, molded owls, and hawks not only keep smaller birds off of fruit trees, but also deter garden rodents. Especially effective are owls made with glass eyes and bobble heads. Whether using scarecrows or owl or hawk replicas, the secret is to not keep them in the same



place in the yard. Move your scarecrow every few days. By moving your owl it will appear to have been on an evening's carnal rampage, and the birds will keep their distance! This triple play on the birds keeps them guessing, "is it real, or is it fake?"

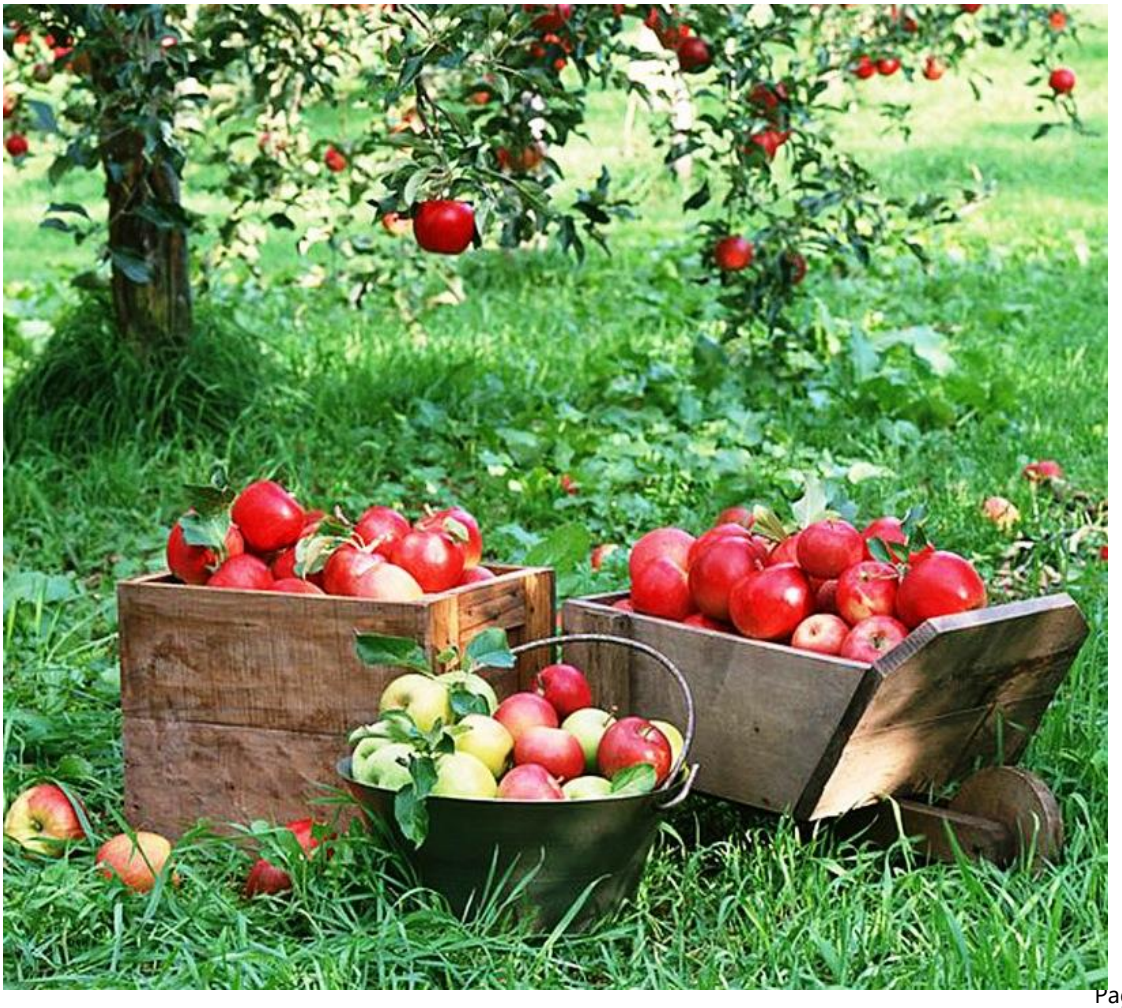
Conclusion

Congratulations! You are now on your way to becoming a fruit tree gardening master. I hope this guide has given you the information you need to get the best trees and grow an exceptional crop. If you have questions or want more information, however, please come by and see me or any of our garden experts in the store and we would be happy to help you out.

As always, thanks for choosing Watters Garden Center and I look forward to seeing you soon!

Ken Lain

The Mountain Gardener



Appendix

Pollination Charts

How to read these charts: Find the variety you want to plant (or already have) in the left column and move across the columns to find other varieties that will cross-pollinate to increase harvest.

Y = good cross pollinator for that cultivar (variety)

N = will not cross pollinate with that cultivar

SELF = partially self pollinating cultivar

Apple Pollination Chart											
	Braeburn	Rome	Fuji	Gala	Golden Deliciou	Homey Crisp	McIntosh	Red Deliciou	Jonagold	Spartan	Granny Smith
Braeburn	SELF	Y	Y	Y	Y	Y	Y	Y	N	Y	N
Rome	Y	SELF		Y	Y	Y	Y	Y	N	Y	N
Fuji	Y	Y	SELF	Y	Y	N	Y	Y	Y	Y	Y
Gala	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y
Golden Delicious	N	Y	N	N	SELF	Y	Y	Y	N	N	Y
Honey Crisp	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y
McIntosh	Y	Y	Y	Y	Y	Y	SELF	Y	N	Y	Y
Red Delicious	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y
Jonagold	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N
Spartan	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N
Granny Smith	N	N	Y	Y	Y	Y	Y	Y	Y	N	N

Pear Pollination Chart

	Bartlett	D' Anjou	Bosc	Comice	Seckel	20th Century	Asian
Bartlett	SELF	Y	Y	Y	N	Y	Y
D'Anjou	Y	N	Y	Y	Y	Y	
Bosc	Y	Y	Y	Y	Y	Y	Y
Comice	Y	Y	Y	SELF	Y	Y	
Seckel	N	N	Y	Y	SELF	Y	Y
20th Century	Y	N	Y	Y	Y	SELF	Y
Asian	Y	N	Y	Y	Y	Y	N

Cherry Pollination Chart

	Bing	Sam	Van	Montmorency	Rainier	Stella	Royal Ann	Utah Giant	Lapins	Black Tartarian
Bing	N	Y	Y	Y	Y	Y	N	Y	Y	Y
Sam	Y	N	Y	Y	N	Y	Y	N	Y	Y
Van	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
Montmorency	Y	Y	Y	SELF	N	Y	Y	Y	Y	Y
Rainier	Y	N	Y	N	N	N	N	N	Y	Y
Stella	Y	Y	Y	Y	N	SELF	Y	Y	Y	Y
Utah Giant	Y	N	Y	Y	N	Y	N	N	Y	Y
Lapins	Y	Y	Y	Y	Y	Y	Y	Y	SELF	Y
Royal Ann	N	Y	Y	Y	N	Y	N	N	Y	Y
Black Tartarian	Y	Y	Y	Y	Y	Y	Y	Y	Y	N

Plum Pollination Chart							
	Burgundy	Santa Rosa	Shiro	Satsuma	Elephant Heart	Superior	Beauty
Burgundy	SELF	Y	Y	Y	N	Y	Y
Santa Rosa	Y	SELF	Y	Y	Y	Y	Y
Shiro	Y	Y	N	Y	N	Y	Y
Satsuma	Y	Y	Y	N	N	N	N
Elephant Heart	Y	Y	N	N	N	Y	Y
Superior	Y	Y	N	N	Y	SELF	Y
Beauty	Y	Y	N	Y	Y	Y	SELF