Planting Fruit Trees

Fruit trees and many small fruit plants are usually sold bare root, and it is vital that roots never dry out before planting. When plants arrive from the nursery, open the bundles immediately and check for moisture. If the roots are not moist, they should be soaked in water for six to 12 hours before planting. Packages with moist roots can be repacked and placed in a cool, sheltered area if the trees will be planted in a day or two. If wet soils will prevent planting for several days, plants should be heeled in. To do this, dig a trench in a sheltered, well-drained area out of the sun. The north side of a building often works well. Lay the plants so the roots are in the trench, and then place soil over the roots. Firm the soil and add water if the soil isn't already quite moist. You should not leave plants heeled in for more than two to three weeks.

Plants can be placed in a bucket of water as planting holes are prepared. Make the planting hole wide enough to accommodate all the roots without twirling them inside the hole. If there is an especially long root, cut it to fit. Twirling long roots inside the hole may eventually girdle the tree. Do not add organic matter to just the backfill soil. However, adding organic matter to larger area than just the planting hole can be beneficial. Adding amendments to just the planting hole in heavy soil creates a “pot” effect that can fill with water and drown your new tree.

Planting depth is important. For apples, make sure the graft union is between 3 and 4 inches above the soil surface after the tree is fully in place. If the graft union is below the surface, the tree will develop scion roots. The graft union for peaches should be buried below the soil surface. Other fruit plants should be planted at the same depth they were in the nursery. Bark color normally allows you to identify the original planting depth. Water the plants in immediately after planting to eliminate air pockets and ensure there is plenty of water for root uptake. Do not fertilize. (WU)
Apple Tree Sprays

Two common diseases on apple trees are cedar apple rust and apple scab. Though some apple varieties are resistant to these diseases — including Liberty, Jonafree, Redfree, Freedom, Williams Pride and Enterprise — most varieties are susceptible. For a description of disease-resistant varieties, go to http://ohioline.osu.edu/hyg-fact/1000/1401.html. Fungicide sprays during April and May are critical to preventing disease on susceptible varieties. A fungicide that is available to homeowners and very effective for control of apple scab and cedar apple rust is myclobutanil (Immunox). There are several formulations of Immunox, and only one is labeled for fruit. Check the label. Bayleton (Green Light Fung-Away) is excellent on rust but poor on scab. Captan, a common component of fruit tree sprays, is excellent on scab but does not control cedar apple rust. Sprays should be done on a 7- to 10-day schedule to keep the protective chemical cover on the rapidly developing leaves and fruit. An insecticide will need to be added to this mixture after petal drop to prevent damage from codling moths that cause wormy apples. Methoxychlor or malathion can be used as an insecticide. In order to protect bees, DO NOT use any insecticide during bloom.

Although gardeners may continue to use myclobutanil throughout the season, certain other fungicides are more effective on summer diseases such as sooty blotch and fly speck. Consider switching to Captan or to a fruit spray mixture about June 1.

A spreader-sticker can be added to the fungicide-insecticide chemical mixture to improve the distribution and retention of the pest control chemicals over the leaves and fruit. A hard, driving rain of about 1 inch or more will likely wash chemicals from the leaves and fruit. In such cases, another application should be made. You can find information on controlling insects and diseases on fruit trees in our publication titled “Fruit Pest Control for Home Gardens” at http://www.ksre.ksu.edu/library/hort2/c592.pdf (WU)

VEGETABLES

Controlling Weeds in Home Garden Asparagus Beds

The best time to control weeds in asparagus is early spring before the asparagus emerges. A light tilling (or hoeing) that is shallow enough to avoid the crowns will eliminate existing weeds. Many gardeners like to mix in organic matter during the same operation. To keep weeds out, apply mulch.
Herbicides can also be used before asparagus emerges. Glyphosate (Roundup, Killzall) will kill weeds that are actively growing, and the preemergence herbicide trifluralin can be used to kill weed seeds as they germinate. Trifluralin is found in several products but not all of them list asparagus on the label. Those that do include Miracle-Gro Weed Preventer Granules and Monterey Vegetable and Ornamental Weeder.

No herbicides can be used during harvest. However, the end of harvest presents another opportunity. Remove all fern and spears, lightly till the bed, and mulch. You may also apply Roundup after the top growth has been removed to control virtually all of the weeds present.

Past the harvest season and after regrowth of the asparagus, options are limited. Products that contain sethoxydim can be applied to asparagus to kill grassy weeds. Sethoxydim has no effect on broadleaves. The two sethoxydim products I’ve found available to homeowners that are labeled for asparagus are Monterey Grass Getter and Hi-Yield Grass Killer. So what about broadleaves? Really, your only option is to pull them and look forward to next year. (WU)

**Master Gardener Tomato Trials**

Each year we have Master Gardeners across the state test varieties of peppers and tomatoes. This article will present the results of the tomato trial from 2009, and a companion article will look at pepper results. We tested two groups of tomatoes; small-vined (semi-determinate) and large-vined (indeterminate). In each trial, we used a proven older tomato that had done well in past trials to for comparison.

We tested five varieties of small-vined tomatoes against Crista, our standard. Five varieties (Road Runner 3, Scarlet Red, Red Defender, Mountain Glory and Security 28) in addition to Crista will be discussed. The “yield” winner was Security 28 (105 fruit) with Road Runner 3 (100 fruit) a close second. This was followed by Crista with 89 fruit per plant, Mountain Glory (86 fruit), Scarlet Red (72 fruit), and Red Defender (60 fruit). The largest tomato was Scarlet Red with an average of 6.5 ounces per fruit followed by Road Runner 3 and Crista at about 5 ounces. All the others were between 4.5 and 4.8 ounces.

Scarlet Red, Red Defender and Security 28 belong to a new group of tomatoes that have a flavor-enhancing gene. My pick for the top three would be Scarlet Red for its huge size and enhanced flavor, and Security 28 and Road Runner 3 for total yield.

The large-vined tomatoes included Jetstar (our standard), JetSetter, Sunsugar and Country Taste. Sunsugar is a cherry type tomato and came in first for number of fruit and last in total weight of fruit. As the name suggests, it is a very sweet tomato and is often compared to a fruit rather than vegetable in sweetness.
The pairing that interested me the most was Jetstar and Jetsetter. Jetstar is an old proven variety that has been around for years, and Jetsetter is often suggested as in improved Jetstar. Our data showed Jetsetter was a bit more productive (produced 96 fruit compared to 87 for Jetstar) but a slightly smaller (4.27 oz/fruit compared to 4.58 for Jetstar). I will do my own study at home this year and see if this holds, but for now I would go with either one unless you have a problem with cracking. If so, go with Jetstar as it is the most crack-resistant tomato we have.

Country Taste is one of a new group of tomatoes known as Heirloom Hybrids or Heritage tomatoes. These are modern renditions of old heirloom varieties. True Heirlooms are often prized for their superb flavor. These new hybrids look like the true heirlooms while adding productivity and disease resistance. However, the flavor is usually comparable to our modern types. Country Taste was the highest yielding and produced the largest tomatoes among the indeterminate types. That is impressive considering the competition. (WU)

**Master Gardener Pepper Trials**

Each year we have Master Gardeners across the state test varieties of peppers and tomatoes. This article will present the results of the bell pepper trial from 2009 and a companion article will look at pepper results.

We compared new bell pepper varieties against Camelot, a proven, standard pepper variety that has done well in past trials. Varieties included Excursion II, Declaration, Karisma, Revolution, Flavorburst, and Alliance. Our best producers were Alliance, Flavorburst and Revolution with all producing a bit over 47 fruit per plant. Camelot, our standard, gave us 33 fruit per plant. Declaration, Excursion II and Karisma all produced less than 30 fruit per plants. Alliance topped all others in weight per fruit and therefore would be our first pick followed closely by Flavorburst and Revolution. (WU)

**MISCELLANEOUS**

**Transplant Solutions and sidedressing**

Transplant solutions are mild fertilizer solutions that are applied to newly transplanted vegetables and flowers. Transplant solutions are also called starter solutions or root stimulators. Plants not given a transplant solution often develop a purplish tinge to the leaves caused by a phosphorus deficiency. Surprisingly, the soil may have plenty of phosphorus but plants often have difficulty
taking up nutrients in cool soils. The starter solution places soluble nutrients near the roots so the plants get off to a good, strong start.

Transplant solutions are available for sale but are often sold under the name of root stimulators. It is also possible to make your own transplant solution from a fertilizer that contains more phosphorus than nitrogen or potassium such as a 5-10-5, 10-20-10 or 11-15-11. Mix 2 to 3 tablespoons of one of the above fertilizers in a gallon of water several hours before use. The fertilizer won’t completely dissolve but enough will go into solution to get plants off to a good start. Use about 1 cup of transplant solution for each transplant.

Sidedressing is a fertilization done after the plants are established. A fertilizer containing primarily nitrogen is used to keep plants growing and productive. Nitrate of soda (16-0-0) is often used at the rate of 2 pounds fertilizer per 100 feet of row. More commonly available lawn fertilizers such as a 30-3-3, 29-5-4 or something similar can also be used but cut the rate in half. Be sure any lawn fertilizer used does not contain weed preventers or weed killers. Note that most fertilizers weigh about 1 pound per pint of product.


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