



Fertilizing fruit crops

We've turned another calendar page and that means gardening season really is ramping up. For those of you who grow fruit crops, there are several varieties that need to be fertilized at the beginning of the growing season.

Remember, different fruit crops have different nutrient requirements, so don't treat them all the same. In addition, nutrient requirements of a plant change with age. Which nutrients and how much a plant needs are best determined with a soil test. Recommendations below are general recommendations in the absence of a soil test. I'm going to look specifically at blueberries for most of this column as they are relatively easy to grow.

Fertilizers carry nitrogen in two different forms, either as ammonium or a nitrate. For blueberries, select a fertilizer with the ammonium form of nitrogen such as urea, sulfur-coated urea, ammonium sulfate and cottonseed meal. Any fertilizer sold for azaleas or rhododendrons also should work well. Note, a pH of 4.5 to 5.2 is best for optimum blueberry nutrition. If soil pH is too high, sulfur may be added to lower the soil pH. In central Oklahoma, the pH generally is a little high and sulfur-based fertilizer products will help maintain a pH that your blueberries will appreciate.

To prevent excessive losses through irrigation water, select a slow-release nitrogen source. Blueberries require a lot less nitrogen than other fruit crops. Excessive amounts of nitrogen can kill blueberry bushes. Apply nitrogen in small applications – once before bloom, once after fruit set and again in the fall. [Oklahoma State University Extension](#) has more information on [blueberry production](#) on its website.

When gardeners are ready to apply fertilizers, begin by loosening the soil around the plant by gently cultivating. Don't go too deep or you'll damage the roots. Apply the fertilizer uniformly around the drip line of the blueberry bush and extend 1 foot outward. Don't ever put the fertilizer at the base of the plant and be careful about getting it against the trunk because this can damage the stems.

Ideally, apply fertilizer when the foliage is dry and avoid getting it on the leaves. If you happen to get some on the leaves, brush it off immediately.

Once the fertilizer is spread, gently work it into the soil to a depth of 2 inches. Apply about one inch of water if rain is not expected within a day or two. Fertilizer application stimulates plant growth, increases berry size and boosts total production.

Fertilizer is applied to grapes in much the same manner, gently working it into the soil in a broad circle around the vine. Second-year vines will require 1 pound of a balanced 10-10-10 fertilizer. This amount is increased to 1.5 pounds to 3 pounds per vine in the third and later years. For young vines, the required fertilizer is split among three to four monthly applications in spring through early summer. For bearing vines, a single, early spring application is sufficient.

Backyard fruit trees are typically part of the landscape as opposed to being planted in the garden. They're more commonly over-fertilized than under-fertilized due to the fact when the lawn is fertilized, so are the trees.

It's important for gardeners to pay careful attention to the tree's nutrition needs when determining fertilizer applications for the lawn. Excessive fertilizer can cause limb breakage, poorly colored and soft fruits, and delayed ripening and bearing. More than the required amount of each nutrient may harm the plant. Apples, peaches and plums generally require 1 pound of a balanced 10-10-10 fertilizer per tree per year of age, up to a maximum of 5 pounds. Cherries require a little less, using about $\frac{1}{2}$ pound per year of age. Pears are very sensitive to over-fertilization, so limit applications to $\frac{1}{3}$ pound to $\frac{1}{2}$ pound of a balanced 10-10-10 fertilizer per tree per year of age. Excess fertilization causes weak growth susceptible to fire blight.