



## Feeding Your Tomatoes

**The fertilization of tomatoes** is a troublesome and confusing subject for many gardeners. Sometimes we give credit or blame to the fertilizer, when the weather, general care, or other factors may be responsible. Few of us take the time to do a careful, fair, comparison study. One thing I don't argue with is success. If someone is getting great results while breaking all the standard suggested guidelines, I won't be the one to tell them to change their gardening habits.

Tomato experts don't always agree on fertilization, but there are some commonalities. It is clear that nitrogen (the first number on the fertilizer label) should be minimal. Higher nitrogen would promote more foliage and fewer flowers, and therefore less fruit. Phosphorous (the second number on the label) is needed to produce flowers (and therefore fruit.) For tomato fertilizer, phosphorous is often the highest of the three numbers on the label.



All this attention to fertilizer is most important if you are growing in containers, with a bagged growing mix. Today's growing mixes usually have an excellent consistency for most kinds of plants. They are also sterile, which is very important in controlling many diseases. Many of the mixes contain an all purpose fertilizer. This is good, but I still like to add fertilizer that is specifically for tomatoes. I usually try to sample something new every year. It seems like I always get pretty good results, so I don't really believe that there is a huge difference in them, provided the numbers are "in the ballpark."



This attitude is reflected in James Fizzell's book "Guide to Wisconsin Vegetable Gardening" when he simply recommends (for tomatoes planted directly in the ground) to "Use 10-10-10 at the rate of 1 pound per 100 square feet of bed. Repeat every 3 to 4 weeks."

If you are growing your plants directly in the ground, you will usually need less fertilizer because the ground already has nutrients in it (unless they have been depleted.) In a previous discussion of tomato problems we discussed "blossom end rot." This common problem can be reduced by adding calcium to the soil. This can be done in the form of bone meal, eggshells, and some specialty fertilizers contain calcium. Not all tomato varieties are likely to have this problem than others---it is most common in paste (Roma) tomatoes.

### "Blossom Drop"

After the tomato plants have put on some growth we will start to see the first yellow flowers, and we know that each flower is capable of producing fruit. Sometimes we see a phenomenon known as blossom drop. This is when the flower falls off before it is fertilized, so it does not produce fruit. This can be caused by several things---extremely high or low temperatures, or periods of heavy rain during flowering. Not all plants are affected the same way----some may lose their flowers while a neighboring variety may not. If you are growing a number of plants of different varieties, there is usually no shortage of fruit, even if some plants experience this problem. Affected plants will flower again, usually quite soon. There is a spray called "Blossom Set" that helps guard against this problem, but I have not tried it.



### "Tomato Plant Supports"



One of the more discouraging things in the late summer garden is to have your huge tomato plants fall over when they are laden with fruit. This is because you haven't supported them properly. If you are using a stake, make sure it is strong and that it is firmly embedded in the ground. If you are using cages, make sure you buy good ones that are tall, with a heavy gauge wire. Tall, indeterminate plants make up about 90% of the plants we sell. These plants will easily get 6' tall. (For a discussion of determinate/indeterminate tomatoes [click here](#).) Flimsy cages will break if they are overburdened and any way they are too small for tomato plants---buying a proper cage makes far more sense. You can put them on your wish list for Father's Day or some other occasion. They make a great practical gift. Our favorite tomato cages are called the "World's Finest Tomato Cage." They come in either one or two sections, depending on the style, they fold away for easy storage, they have a heavy gauge metal, and they are very tall. They will last for many years.