

Five Common Garden Myths by Stephanie Suesan Smith, Ph.D.

I got some manure from my neighbor and put it on my garden. It should do well because compost is good for gardens.

Manure is not the same as compost, whether it just came from an animal or has been sitting around for years. Compost is decomposed organic matter. Some of the components of compost may be manure, kitchen scraps, grass clippings, dry leaves, sawdust, shredded newspaper, hay, and other organic matter.

Composting used to be part of life. Manure and straw were piled up with the remains of the kitchen, plants that were spent, and any other organic debris and allowed to cook into humus so the fields could be fertilized with it. No synthetic fertilizers, so farmers made their own.

Now, however, lawn clippings, leaves, and other compostable things account for up to as much as 50% of the trash coming into the landfill. We are running out of room for landfills. We need to recycle our organic matter just as we recycle our aluminum cans.

I realize that most city people do not have access to manure. However, you can pick a corner of the yard and build a 3 X 3 X 3 container with no bottom. That is the compost bin.

Into it you deposit a 3 inch layer of leaves, then a 3 inch layer of grass and kitchen scraps. No meat, dairy, or used oil as that attracts scavengers. Then put another 3 inch layer of leaves and repeat until the container is full. Water the whole thing enough to be damp but not soggy. If you do this starting in the spring and summer, the compost will be ready for the next spring.

If the compost is ready, it will be dark brown, crumbly, and you will not have any lumps that are identifiable as what they were before they became compost. You may find that you produce enough organic material to need multiple bins. That also has the advantage of letting one or more bins cook while you use the first bin.

This just scratches the surface of composting. I recommend the article on Aggie Horticulture on <http://aggie-horticulture.tamu.edu/publications/landscape/compost/intro.html> as a more thorough treatment of the subject.

The end of my tomato rotted just when it got ripe.

Nothing is more frustrating than to have a big, beautiful tomato that is just about ripe develop a rotting spot on the bottom, where the blossom was. This is what blossom end rot does. It can take out half the tomato or stay a small speck, but the tomato is no longer so beautiful.

The cause of blossom end rot is a lack of calcium in the plant. Before you go dump calcium all over your tomatoes, you need to understand that it is more complicated than that. The calcium may all ready be in the soil. However, if there is too much of any of these compounds, it may effect the plants ability to draw the calcium into the plant and use it: magnesium, potassium, sodium, or ammonium salts.

Most tomato fertilizers have these compounds in them. Early over fertilization can cause a problem because the tomato grows too fast, and needs more calcium to function than it can draw

up, and because the fertilizer introduces too much of the suspect compounds into the soil. Of course, over fertilization is never good. It wastes money and risks burning the plant.

The second part of the equation is watering practices. The tomato plant needs to get enough water, but not too much. It is helpful to keep the water from getting on the fruit. Drip irrigation or soaker hoses work well. The plant does not need to dry out or start to wither between waterings, but it should not be wet, either. In hot climates such as Texas, plants should be watered twice a week with one inch of water delivered each time. If it rains, adjust the irrigation for that watering period accordingly.

One big help with keeping blossom end rot at bay is mulching. Mulch around the plant both keeps the fruit off the ground and helps hold in moisture and release it gradually to the plant. Staking or caging the tomato plant will help keep the fruit off the ground, too.

The bottom line is that blossom end rot happens when the calcium uptake into the plant goes wonky and is made worse by watering problems. Be careful how you fertilize and how you water and you should be able to keep blossom end rot at bay.

I got these seeds on sale and I am going to save them until next year.

Cheap seeds are expensive. They cost a great deal in wasted time, money, fertilizer, water, and space. This is because the germination rate, or number of seeds in each packet that actually sprout, is usually very low. You plant seeds and do all the right things, but nothing happens.

Seeds that are carefully saved from plants you or some other gardener grew and then planted are not the problem. No, there are too major situations where cheap seeds cause grief. The first is the "closeout seed" and the second is the "too good to be true" seed.

Closeouts of seeds are usually held at the end of the calendar growing season. For example, flower seeds are sold at the end of summer when back to school stuff is flooding stores. Because seed sold by reputable growers is packed and sold the same year, few bother to hold any over. They put it on sale, and the sales can be first rate.

The problem is that then the seed must be saved a year before it is planted. Seed will keep under the right conditions for many years, but it is rarely kept in those conditions in a home. So the germination rates fall to the single digits and the cheap seed doesn't turn out to be so cheap. All the effort and inputs (fertilizer, water, mulch) were wasted. Spending a dollar for a new packet versus ten cents for an old one doesn't look so foolish now.

The second problem is the "too good to be true" seed. These are almost exclusively catalog and internet sellers that buy lots of seed at the end of the growing season. They repackage it and then hold it in a warehouse somewhere until the next growing season. Seeds are sold in large packages for very low prices. Sometimes you can get a whole garden for ten or twenty dollars.

Again, the problem is the less than optimal storage, not to mention the less than optimal ethics of the seller. Seed is alive, and deteriorates when not cared for properly. You can plant a huge package of the seed and get one or two plants, and those don't produce well. Off to a bad start, they struggle all season. Remember what you have been taught: if it sounds too good to be true, it probably is.

Although the seed catalogs are wonderful to look at, for the most part, the best seeds are from local farm and ranch or nursery places. They have to deal with customers in person who have poor stands of plants. Make sure you pick one that sells enough seed so that they reorder each spring for vegetables and whenever the flowers you want are to be planted. Avoid the big box stores as they may stock varieties that do not grow as well in your area. Then you can feel superior while you hand extra produce to the fellow who bought the cheap seeds.

I'll just spray these vegetables with this pesticide I got for the roses.

Pesticides always seem to be in the news, and they are never portrayed favorably. While it is certainly true that reducing the amount of pesticides used benefits the environment, some use is necessary if we wish to have food, safe homes, and healthy families. It is possible to use pesticides responsibly and safely by following some guidelines.

First, some definitions. Anything that has an EPA number on the bottle is a pesticide. Pesticide is an umbrella term that includes germicides, herbicides, rodenticides, insecticides, and fungicides. It includes other things, too, but those are the most common. People tell me they do not use pesticides because they are bad for the environment. When I ask them if they clean their house with a product that kills germs, they always say yes. That is a pesticide, just as much as agent orange or DDT. Every year children are killed when they drink household cleaners, too.

There are two classes of pesticides: restricted and unrestricted. To buy a restricted pesticide, you must have a pesticide license. You have to take a class on pesticide safety and laws and pass a test to get the license. Then you have to attend 15 CEUs over 5 years to renew the license. This is primarily for farmers and ranchers or professional pest control people. It doesn't hurt homeowners to have the license, but it isn't necessary, either.

Unrestricted pesticides are the kind you can buy at any store to kill ants, bugs, weeds, and germs. There is some very important information on the label of a pesticide. The label is the law. If you use a pesticide in a way that is not on the label, you can be fined or even jailed, especially if someone got hurt. Generally, someone sprays a herbicide too close to the neighbor's property and kills their plants, and the neighbor reports them. The EPA and the Department of Agriculture get involved, and that is a bad deal. So follow the directions on the label.

It is important to mix the product as directed. More is not better. It is just more dangerous. Be sure to wear the appropriate clothing when using a pesticide. Shorts and sandals are not appropriate. Long pants, long sleeves, closed toed shoes, and sometimes a dust mask or respirator are appropriate. Make sure when you are through and have cleaned your equipment, you strip at the door and go shower. Then wash those clothes separate from anything else to make sure you do not get any pesticide residue on other clothes. Depending on the pesticide, double washing may be necessary.

The other mistake people make is not observing the let off period. For example, you put down a pesticide in the backyard, or someone does. You are supposed to wait 24 hours before you use the yard. You forget and let the dog out to go potty. The dog not only is exposed to the pesticide, but gets it on his fur. He comes in and your child plays with the dog. Now both of them have pesticide on them, and spread it every where they touch. The whole family gets sick, and the dog may die. Pay attention. That stuff is on the label for a reason.

If something does happen and someone gets sick or ingests a pesticide, call poison control immediately. Make sure you have the label of the product that the person ingested or was exposed to. They can tell you what to do and can contact the ER if necessary with the antidote information.

Safety articles always talk about worse case scenarios. Most people use pesticides safely and responsibly and never have a problem. However, the information is like taking a CPR course -- every one hopes you never need it, but if you do, it may save a life.

It must be safe, it is natural.

There has been a lot of press lately towards using “natural” products to treat illnesses, kill pests, and fertilize plants instead of “synthetic” chemicals. The assumption has been if it is natural, or organic, it is safe. This is not necessarily so for several reasons.



This photograph is of a foxglove plant, *Digitalis purpurea*. The foxglove plant was traditionally used to regulate heartbeats and strengthen the heart. The drug digitalis originally came from this plant. It saves many lives. However, the plant itself is poisonous if eaten because of this compound.

Many herbs contain medicinal compounds that were used to treat health problems before modern medicine. In many cases, these herbs, and the skilled practitioners that used them to treat patients, worked. In some cases, though, the old uses for herbs were harmful or have such severe side effects that modern medicine does a better job of treating the illness.

In organic farming, the use of synthetic fertilizers and pesticides is prohibited. However, some organic compounds are prohibited. Nicotine, arsenic, and cyanide are among them. Old timers will tell you tobacco juice (from chewing tobacco) will kill grasshoppers. It will, but it kills everything else too. That is why it is prohibited in organic gardening.

Many “organic” remedies are packaged as supplements to avoid FDA scrutiny. Many times when the ingredients are analyzed in a laboratory, the supplements either do not have the product

in them that they claim, or they have ingredients in them that are not on the label. Such products should be used with caution.

I am not saying using herbal remedies in place of modern pharmaceuticals is wrong. Nor am I saying organic farming is bad. I am simply saying that just because something is natural or organic does not mean it is safe. Scrutinize the herb or remedy carefully before using. Make sure you know what is in that remedy and what the side effects are before you use it. Everything has side effects, including herbs. They may be less noxious than when taking some synthetic compounds, but they exist. Finally, understand that not all organic compound, whether they are pesticides, medicines, or supplements, are safe. (Think ricin, used to poison several people in the last few years). Not all synthetic compounds are evil. Use the same caution when using organic items that you would with any other product so that you can make an informed choice.

Stephanie Suesan Smith mainly uses her Ph.D. in clinical psychology to train her dogs. She is also a master gardener, member of the Garden Writer's Association, and woodworker. Stephanie writes on almost any nonfiction topic and has had some unusual experiences that contribute to that ability. Getting pooped on by a rattlesnake probably ranks tops there, but things just seem to happen to her. View more of them at www.stephaniesuesansmith.com. View her photos at photos.stephaniesuesansmith.com. View her woodworking at wood.stephaniesuesansmith.com.