

**Yard and Garden – 11-19-2011- Ted Griess / Extension Horticulture Assistant**

One bad apple spoils the whole bunch. What do you think? Is there any truth to that statement?



Sitting atop our kitchen counter are three or four dozen tomatoes representing the end of this year's crop. Some are still green, but the majority continues to ripen. With any luck at all, we will be able to enjoy eating most of them before they spoil. I hate throwing away produce that has gone bad whether I have personally grown it or purchased it.

I recently read an article in *Vegetarian Times* stating that Americans throw out twenty-five percent of the produce they buy. What a waste.

When growing one's own fruit or vegetables, all too often one is confronted with a serious decision. Most of the time when produce is ready to harvest, more is available than one can possibly consume. Managing the excess to avoid waste becomes the challenge. Sharing with others is always a good idea. Preserving by canning or freezing is another viable option, but more often than not, one is left with storing the produce.

Proper storage makes the difference in lengthening the shelf life of most fruits and vegetables.

First, one must understand respiration. Respiration is the process by which plants take in oxygen and give off carbon dioxide. It is a basic process of all plant material. Freshly harvested produce undergoes respiration, exhausting the stored starch and sugar within; and when these reserves are gone, the produce dies and decays. The warmer the temperature the faster the rate of respiration. Refrigeration slows respiration. Thus, the most common way to store produce is refrigeration.

However, some fruits and vegetables are cold sensitive. Bananas and tomatoes are examples, and if stored at low temperatures will lose flavor and moisture. It is better to store them at room temperature, and once they fully ripen, refrigerate them. Never refrigerate onions, potatoes, winter squash or garlic. Store these items in a cool, dark environment. In that environment, they should last for months.

If you have ever experienced produce that spoils in the refrigerator in just a few days, perhaps you might be storing incompatible fruits and veggies together. More than likely, the culprit is ethylene gas. Emitted by many fruits, this odorless, colorless gas influences ripening and hastens decay.

For example, leafy vegetables such as lettuce and spinach are very sensitive to ethylene gas, even at low quantities. When exposed to this gas, they will turn yellow and limp and will spoil in just a couple of days.

Major gas-producing fruits include apples, apricots, avocados, unripe bananas, cantaloupe, cranberries, figs, grapes, lemons, limes, mangoes, nectarines, oranges, peaches, pears, plums and tomatoes. The trick is to separate produce that emits ethylene from produce that is sensitive to it.

As mentioned earlier, refrigeration is usually best, but of those gas producers listed only refrigerate apples, apricots, cantaloupe, and figs. The other gas producers store better when not refrigerated.

Those sensitive to ethylene gas include ripe bananas, broccoli, cabbage, carrots, cauliflower, cucumbers, eggplant, lettuce and other leafy greens, peas, squash and sweet potatoes.

Whenever storing, avoid sealing fruits or veggies in airtight bags. By so doing, one will cut off respiration entirely thus speeding up decay. It is better to wrap sensitive produce in paper towels. I did read that some innovative products can actually absorb ethylene. One called the E.G.G. (ethylene gas guardian) can be dropped into the crisper drawer. A variety of produce bags are also designed to absorb ethylene.

Can one bad apple spoil the whole bunch? Yes, it certainly can, but even a good apple might spoil the whole bunch. It all depends on what the bunch is.