

Gardeners – Start your Broccoli!

Although Broccoli is the second most popular variety of the cabbage family (after cabbage) it is not necessarily easy to grow in the home garden. For optimum growth it requires 60-90 days (depending on variety) when temperatures range between 40F and 65 F and a soil and climate where it will not be water stressed. Those conditions never exist in southern New Mexico, and are rare in most of the U.S.

But, now is the time to start those broccoli seeds indoors so you'll be ready for that small window of spring broccoli growing opportunity in this area. (There is another window of opportunity in the fall – more about that later.)

Here is how I plan my timing for broccoli. Plant seeds 4-6 weeks before last frost (in the neighborhood of April 1). I use row covers on spring broccoli, so that date can move to mid-March. Do the backwards (aggie) math and now is the time! By the way, the row covers are not only to move the planting date up a couple of weeks, but to hold night temperatures above 40F and to reduce the stress from wind, water and insect predation. Your broccoli seeds will germinate in 3-7 days and will need good sunlight, cool temperatures and not too much nitrogen to get started off right in life. That'll get you good strong seedlings for transplanting – and do that by the end of six weeks – for everything you do with broccoli affects the quality and abundance of the harvest.

The secret life of Broccoli:

It is immune to low temperatures for the first four weeks of life, but after that watch out, not for freezing, but for prolonged periods (7-10 days) of temperatures below 40F. Exposure to temperatures in that range will cause many varieties to bolt prematurely and form small heads. The reason for those row covers - reduce the risk of bolting!

The first stage of growth is to get “out-of-this seed” and put down roots. The second stage is to grow a strong plant with abundant leaves for nutrient storage. The third stage is to store nutrients in those leaves for the final thrust. The fourth stage is make a blossom and produce seed. If you take care of the plants needs during the first three stages it will produce abundant flower buds during the last stage. If you don't, doesn't matter what you do at bloom time – it's already a done deal! Another reason for those row covers – protect that plant from stress when it is putting down roots, making leaves and storing nutrients.

And now for a word about the third stage of life: it appears that little is happening during this time. But, it is critical that your broccoli receives enough water, nitrogen, phosphorous, potassium and trace minerals at this time. Sort of like a long distance runner carbo-loading for the stress to come. When broccoli blooms, the demand for nutrients is greater than the root system can provide and it draws on the stored nutrients in the leaves to make those beautiful flowers that will attract the insects, that bring the pollen, that fertilizes the flowers, that make the seeds that guarantee continuations of the species.

Meeting its needs:

Broccoli prefers a soil ph of 6.0 -7.5, but can be grown in slightly alkaline, well drained soil with plenty of organic matter. However, the root system is not efficient enough to cope with drought so keep it evenly watered. Because broccoli has a shallow root system (80% of the roots are between 2” – 12” deep) you can cultivate around them and grow them in pots.

If you are using fertilizers, remember to check out table 1 section 1.D.1 of the MG Manual. Robert Flynn recommends 5lbs. of Nitrogen and 2lbs. of Phosphorous per 1000 sq. ft. for broccoli. Also check the MG Manual section V.C.3 for plant spacing. I plant in blocks not rows and tend to plant closely in very rich soils.

I always under sow my spring broccoli with red and green Salad Bowl lettuce. The lettuce grows quickly, can be harvested young, keeps the soil a little cooler and gets shaded out by the time the broccoli need the root space. I also frequently plant peas on the edge of the broccoli bed – they seem to get on fine with each other.

Eating It!

Harvest the center head when the buds are still small and tight. Cut 4"- 6" of stem. Harvest the side shoots before they begin to flower. Leaves can also be harvested at this time. You can harvest 5-6 leaves from a plant when it is young and not reduce the size of the flower bud. Older leaves may be fibrous and pungent depending on soil conditions and temperatures. The center stem is generally quite edible when peeled.

At temperatures over 70 F. the heads may get loose or ricey and mature unevenly, and side shoots can bloom quickly, so watch them closely for an optimum harvest. In garden grown broccoli, heads may vary greatly in size when they are ready to harvest. If grown in winter the heads may be fairly small, but the plants will still produce side shoots.

My Favorite Recipes:

Raw in the garden - much of my broccoli never survives the walk to the kitchen.

Raw in salads – makes a great combination with those other garden grown green things.

Steamed with butter – not too difficult!

Stir fried with olive oil and sesame seeds – divine!

For the best broccoli, grow your own - it doesn't get any better than that!

Sources for more information:

The Master Gardener Manual section V.C.3 has information on planting, harvesting and varieties.

Garden Secrets by Dorothy Hinshaw Patent (an excellent resource on the "natural history" of food plants.

The Master Gardeners Manual is available online at <http://www.nmmastergardeners.org>

There is more information on growing broccoli off-season, history and photographs as well as links to other master gardener websites at <http://www.darrolshillingburg.com/GardenSite/KnowledgeBase.html>