



Urban Harvest

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Broccoli, Cauliflower, Cabbage and Kale – Cool Weather Gems for Your Winter Garden

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Broccoli, cauliflower, collards, kale, Brussels sprouts, cabbage, kohlrabi, Romanesco, and Chinese stem broccoli (gailan) are members of the Oleracea species in the Mustard Family of Brassicas. They all grow best between temperatures of 55° and 70°. Except for the coldest parts of our area, this means you should grow them in mid-October to mid-April. So wait until then to start your transplants in pots.

Should You Grow Them?

Members of this species contain some of the healthiest vegetables you can find. Generally, the dark green ones are high in vitamins A and C, carotenoids, calcium, and folate and have some copper, potassium, iron, fiber, and other minerals. Of all vegetables, these have the highest amounts of useable calcium: kale has cup for cup about 120% the useable calcium of cow's milk; collards 250%, and broccoli 60%.

Of all vegetables, kale and collards also have by far the highest concentrations of vitamin K and the eye protective phytochemicals lutein and zeaxanthin. According to Ohio State and Rutgers University research, glucosinolates and methyl cysteine sulfoxides in kale, collards, and broccoli become sulphorophanes when cut, shredded or chewed, and these activate detoxifying enzymes in the liver. They also may be potent bladder cancer preventatives. In is no wonder that these vegetables top many lists for being the most healthful.

Of course, not everyone likes broccoli, not to mention Brussels sprouts. If you have ever been the victim of poorly cooked cabbage relatives you know the problem. If cooked too long, the healthful sulfur compounds become very smelly gasses like hydrogen sulfide and ammonia, and the leaves become metallic and bitter. During the fifth through seventh minutes of boiling, Oleracea relatives release double the amount of rotten-egg smelling sulfuric compounds. An enzyme that is destroyed by frost causes this. Frosted leaves are thus sweeter since the sulfur compounds don't breakdown as easily. So Oleracea need to be cooked less than five minutes.

On the other hand, if they are tough because they weren't cooked enough and weren't diced or shredded finely, the fiber may not breakdown in the intestine, and this may cause you to have flatulence. So cut up these veggies into small pieces, and either stir-fry them in hot oil briefly, or pressure cook them 2-3 minutes on a steaming rack or if you must cook them longer, use milk or cheese based sauces.

Kale and collards are healthful but only if you avoid mixing them with the large amounts of animal fats and salt favored by traditional recipes. If you pressure cook kale or collards on a steaming rack, and then either stir-fry them briefly with browned onions or garlic or just add salad dressing, you can eat a delicious **and healthy** vegetable.

Planting Tips

All of the Oleracea are easily and cheaply planted from seed. This is most easily done in gallon pots inside about October 7 and then moved to small pots in a lightly shaded area outside after they begin to develop leaves. Once they begin to grow outside in the pots, move them to the garden spacing them at about 1-2 feet depending on the eventual width of the plant. Kohlrabi and gailan need the smallest spacing, with collards and late cabbage the biggest. You can plant right up to January.

Plant the transplants either late in the day or on an over cast one, and water the soil deeply before applying fertilizer. All Oleracea are “alligators”—they respond favorably to regular feeding of balanced organic fertilizers like Microlife. So put half a cup of fertilizer per square foot on the planting area and cultivate it into the top inch of soil, then water again. Later in the season, if you see bottom leaves yellowing or reddening, you need more fertilizer.

Varieties For Our Climate

Broccoli: almost any variety will do. Some are faster than others, but often the late ones like **Premium Crop** have tiny curds and are more delicious.

Cabbage: for small early ones, try **Early Jersey Wakefield**; for late giant ones, try **OS Cross**; for beauty, try any Savoy type; for flavor, try a Chinese cabbage variety.

Cauliflower: these all do best when temperatures are about 55° but the head will die in a hard freeze, so grow very quick maturing types like **snow crown** and cover them in a freeze. Although it is not so quick maturing, **purple graffiti** (try Johnny’s Seeds online) with its brilliant lavender head is among the most beautiful of all veggies.

Collards: most kinds like **Vates** produce supermarket quality, but the heirloom **Green Glaze** from Seeds of Change (online) is beautiful and really delicious.

Gailan Chinese stem broccoli is best if one of the modern hybrids since these have thicker and more succulent stems to cut up in your stir-fries. Get these from Evergreenseeds online.

Kale: **Tuscano** kale (a.k.a. palm leaf, Lacinato) has about twice the lutein and beta-carotene antioxidants of the very nutritious Green Glaze. **Dwarf Blue Scotch Kale** is another heirloom winner. **Red Russian** kale is a distantly related relative that also makes fine eating. Although all kales are beautiful, **Redbor** is a striking and gorgeous red.

Kohlrabi: **early purple Vienna** and **early white Vienna** are the standards by which all others are measured. These tender sweet stems make great winter cucumber substitutes in salads. Just cut the bulb off about the root and peel.

I can't really recommend either Romanesco or Brussels sprouts because they take many months to grow and prefer temperatures that we have only for short times, so they do not produce much for the effort. But the rest of them join salads as the mainstay of the winter vegetable garden. They are easy and nutritious, so why not do something for your health this fall?

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