



Growing Winter Vegetables in Containers—Summary

Presented by UC Master Gardener Terry Lippert

VEGETABLES THAT GROW WELL IN WINTER MONTHS

- Broccoli
- Brussels sprouts
- Onions, Garlic, Shallots
- Salad Greens (leaf lettuce, arugula, endive, cress, radicchio)
- Potatoes
- Fava Beans
- Cauliflower
- Peas
- Spinach
- Carrots
- Beets
- Kale
- Radishes
- Root Vegetables (beets, parsnips, rutabagas, turnips)
- Swiss Chard

SOIL DEPTH NEEDED FOR VEGETABLE VARIETIES

- 9 - 12 inches for shallow rooted vegetables: lettuces, radishes, green onions, spinach, chard, kale, beets, herbs
- 12 - 16 for moderate depth vegetables: peas, carrots (short varieties), broccoli, cauliflower
- 16 - 18 inches for potatoes, brussels sprouts
- Root vegetables – two to three times the length of mature vegetable

SOIL FOR CONTAINERS

- Make your own container mix by combining equal parts of compost, coconut coir and vermiculite or perlite. Coir is sold in a compressed form and will expand in volume when soaked in water. Soak it before combining with the other ingredients. Many sources suggest the use of peat moss rather than coir. Peat moss is harvested from wetland peat bogs. Because it takes thousands of years to regenerate peat, environmentalists consider peat moss to be a nonrenewable resource. Coir is a byproduct of the coconut industry, and is renewable.
- You may want to add some organic fertilizer to the soil mix (*e.g.*, bone meal for potassium and blood meal for nitrogen). Use about one cup of fertilizer per 5 gallons of soil mix.
- You can add loamy garden soil to your mix, but before you add soil, heat the soil in an oven for 1 hour at 210° F to kill any soil pathogens, insects, or weed seeds.
- Or purchase a good potting mix from a garden center.

HOW TO MAKE AND USE WORM-CAST TEA

- Start with 2-3 cups of worm castings. If you don't have a worm composter, you can buy worm castings in many nurseries or at Our Garden.
- Mix worm castings with water in a five-gallon bucket. Add a tablespoon of molasses to feed the micro-organisms in the worm castings (optional). Stir well. Also stir the mixture a couple of times a day.
- After 24 hours (and not more than 48 hours), dilute the mixture you have created. Add one part of the mixture to 4 parts of water. (Your 5 gallons of mixture will make about 25 gallons of diluted mixture. If you need less, start with less than 5 gallons.)
- Water your container plants (indoor and outdoor) with the mixture.
- Your container plants should be watered with this mixture every two or three weeks.
- Can also be used to water plants that are growing in the ground.



Avoiding Common Problems with Winter Vegetables

BRASSICAS (BROCCOLI, CAULIFLOWER, BRUSSELS SPROUTS, CABBAGE, ETC.)

PLANT PRODUCES NO FRUITS OR ONLY TINY FRUITS.

Cause: planted too late in season. Too little leaf growth before cool fall temperatures. Plant has insufficient nutrient storage to nourish fruit development.

Solutions: In Central Contra Costa County, plant Brussels Sprouts by mid-August. Plant broccoli, cauliflower and cabbage in September. Kale can be planted later since it does not produce fruits.

BROCCOLI BOLTS BEFORE HARVEST.

Cause: If broccoli head forms and starts to mature at temperatures over 80 degrees, it may form flowers before head matures sufficiently for harvest.

Possible Solutions: Plant mid Feb to mid-March and harvest in early summer. Or plant in Sept for winter harvest.

LEAVES ARE FULL OF HOLES.

Likely causes:

Imported Cabbageworm



-or- Cabbage Looper



Possible Solutions: Row Covers, Natural Predators, Bacillus Thuringiensis (“BT”).



ONIONS

PLANTS FLOWER AND NEVER FORM BULBS.

Possible causes: growing onion sets instead of using seeds or seedlings; wrong planting time; wrong variety.

Solutions: in Central Contra Costa County, plant “short day” or “intermediate day” varieties. Place seedlings in garden in February. Try Italian Cippolini onions, which are less likely to bolt and produce flowers and can be planted in October or November.

SWISS CHARD AND SPINACH

MEANDERING PATTERNS ON LEAVES



Cause: Adult leaf miner fly lays eggs on the surface of the leaves. Larvae feed inside leaf.

Possible solutions: row covers; hand-pick eggs. Insecticides will not help; feeding larva are protected inside the leaves.

PLANTING DATES

Planting Dates for Common Winter Vegetables Grown in Central Contra Costa County			
Vegetable	Planting Dates	Vegetable	Planting Dates
Broccoli	Aug. – Sept. (plant seedlings)	Carrots	Aug – Oct. (plant seeds)
Brussels Sprouts	By July 1 for long season varieties By Aug. 16 for short season varieties (plant seedlings)	Swiss Chard	Sept. – Oct. (plant seedlings)
Cauliflower	Aug. - Sept. (plant seedlings)	Endive, Radicchio	August (plant seedlings)
Cabbage	Sept. – Oct. (plant seedlings)	Leeks	Sept (seeds or seedlings)
Kohlrabi	Sept. – Oct. (plant seedlings)	Lettuces	Aug. – Nov. (plant seedlings in hot weather; plant seeds or seedlings in cool weather)



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Onions	Sept. – Oct.; early February. Plant seeds or seedlings in fall; plant seedlings in Feb. if you want bulbs.	Peas	Sept. (plant seeds)
Potatoes	Aug. – mid Sept. or February	Radish	Year round (plant seeds)
Spinach	Sept. – Oct. (plant seedlings; planting seeds OK in cool weather)	Parsnips, Turnips, Rutabagas, Beets	Aug. – Sept. (plant seeds)
Garlic	Oct. – Nov.	Shallots	Sept. – Nov.

SOME ONLINE RESOURCES FOR FURTHER INFORMATION:

- **How to Convert 5-Gallon Bucket into a Self-Watering Plant Container**
<https://extension.umd.edu/hgic/topics/self-watering-containers>
- **Vegetable Planting Guide For Coastal Regions of Contra Costa County**
<http://ccmg.ucanr.edu/files/131285.pdf>
- **Vegetable Planting Guide For Interior Regions of Contra Costa County**
<http://ccmg.ucanr.edu/files/131284.pdf>
- **Vegetable Growing Tips**
<http://ucanr.edu/sites/gardenweb/Vegetables/>
- **University of California. Researching Vegetable Problems**
<http://ipm.ucanr.edu/PMG/GARDEN/veggies.html>
- **UC Master Gardener Program of Contra Costa County—Free Help Desk Advice**
Email: ccmg@ucanr.edu
925-608-6683
Staffed Monday through Thursday 9 a.m. to noon; send email or leave phone message any time.