Container Gardening

Grow with USask



Many urban dwellers believe that they lack the space or proper environment to grow a successful vegetable garden. Just because you live in an apartment or condo; or your tiny backyard is rather shady, that doesn't mean you can't enjoy vegetable gardening. Growing vegetables in containers can provide the best growing environment possible for your garden veggies without you having to relocate, amend the soil or cut down beautiful shade trees

Choosing your container

Any container that can hold moist soil and provide drainage for excess water is a possibility. Containers must be free of contaminants and be food safe. Depending on your budget, containers can be imported colorful clay pots or as simple as the old wooden apple crate grandma has in her shed. Plastic or burlap bags filled with soil have even been good containers for a potato plant: at the end of the season, simply dump out the bag and harvest potatoes.

The key to growing vegetables in pots is to provide a large enough pot for the vegetable being grown. A bunch of radishes can be seeded into a 15cm diameter dish that is only 5-8cm deep. However, this same dish would never sustain a larger plant like a tomato or zucchini or a root plant like a carrot.



Be creative when growing vegetables in pots. If you can imagine it, it is most likely possible. Don't be afraid to experiment and have fun!



What vegetables can be grown in pots?

Any annual vegetable that can be grown in a garden can also be grown in a pot. Perennial vegetables like rhubarb, horseradish and Jerusalem artichokes will not overwinter in pots unless they are buried up to the pot rim in the ground or stored in a heated garage over the winter. Some vegetables will be more challenging to grow than others.

Seeding and Planting

- Follow the same guidelines for seeding and planting vegetables in pots as you would with seeding vegetables in the garden. Seeding depths and spacings do not change. Because pots are above ground and the media in these pots tends to warm up faster than soil at ground level, pots can be seeded a little earlier than your ground garden. Remember that early emerging plants will need to be protected from spring frosts (temperatures at or below 0°C) by moving pots indoors or covering with blankets.
- To speed up seed germination, place a sheet of clear plastic over the rim of the pot to help warm up the soil. Remove the plastic as soon as seedlings have emerged to avoid overheating seedlings. Clear plastic pop bottles with the ends cut off can serve as mini-greenhouses to individual plants in pots.

Some Basic Guidelines

- Provide a large enough pot for the vegetable being grown. Pot size should be determined by considering recommended in-row and between-row plant spacings Plants with larger plant spacing requirements should be planted in bigger containers whereas plants that grower closer together will survive and thrive in smaller containers (ex. spinach, leaf lettuce). Eight litre (2 gallon) containers are recommended for large plants like tomatoes, zucchini, cabbage, broccoli or a corn.
- The growing media must be capable of holding water as well as draining. Garden soil does not drain well in pots and is not recommended for pot grown vegetables. Commercial media containing peat moss, vermiculite, perlite and some micronutrients are recommended. Contact your local garden centre for available products.
- Adding compost or well rotted manure annually is a good idea for pot grown vegetables. This will help provide a base line of nutrients as well as increased organic matter: the organic matter will help hold soil moisture and nutrients.
- Probably the most challenging issue with growing vegetables in pots is maintaining adequate water and fertility management. Keep soil moist but not waterlogged. Provide a weekly soluble fertilizer treatment of 20-20-20. Mix according to label directions. Monitoring water and nutrients is an essential daily task.
- Pot location is important. Locate pots in a location sunny warm location but remember that a hot, windy, dry location will require much more management than a sheltered location. If all you have is semi shade or shade, don't despair, vegetables like lettuce, spinach, mustard greens and beets will grow in shady areas.
- If possible, replace soil annually to minimize disease issues.



Recycled blue barrels cut lengthwise are used on the University of Saskatchewan Rooftop Garden for beans, lettuce and herbs.



Intercropping and Companion Planting

- Intercropping is a method of planting a smaller, fast-growing crop using the space between slower-growing larger vegetables. The quick crop matures just as the slower crop begins to need more space. Possible combinations include lettuce grown around cabbage or broccoli, radishes and green onions grown between carrots, or spinach growing around tomato.
- Companion planting refers to growing two
 different plants together that will provide benefits
 to one or both species of plants. Flowers and/
 or herbs alongside vegetables in pots can be a
 good combination. Companion flowers will attract
 pollinating insects which will also visit your bean, pea,
 tomato, pepper, zucchini or eggplant flowers. Some
 companion plants discourage certain pests. For
 example, marigolds have a distinct odor that tends
 to repel some aphid species. Herbs like savory and
 thyme grown around faba beans or peas will deter
 black aphid infestations. Chives or garlic alongside
 carrots will deter root fly.

Plant Support

• To make the most of your space in your vegetable pots, provide a structure for climbing and sprawling plants. Something as simple as a bamboo stake or pruned tree branches can provide support for pea, pole bean or cucumber plants. Cages or stakes for tomato plants are essential. A cucumber pot braced up against a sunny trellised wall could provide ample cucumbers for a family of four for the season. Cantaloupe and smaller watermelon can be grown vertically as long as developing fruit are supported by a 'sling' made from expandable material such as women's hosiery.