

Best Management Practices-Outdoor Container Gardening

Section One: Containers BMP

Select clean, freely draining containers that are sized appropriately for the number of plant(s).

- Plant size determines container dimensions. Small containers (half gallon or less) accommodate a few small plants; large containers (three gallons+) accommodate large plants.
- A container must have at least one drainage hole with a piece of mesh or screen over it to keep the soil in the container.
- Containers for vegetable plants must: 1) be big enough to support plants when fully grown, 2) hold soil without spilling, 3) have adequate drainage, 4) never have held products that would be toxic to plants or people
- Most plants need containers at least 6-8 inches deep for adequate root growth.
- Porous containers such as clay terra cotta will dry out faster than glazed or plastic containers.
- Use clean containers.

Section Two: Growing Medium BMP

Choose packaged potting soil or a growing medium that is appropriate for the plant(s) to be grown in it.

- Container medium, such as packaged potting soil, is usually porous enough to support plant roots with adequate moisture retention and root aeration.
- Soiless mixtures, such as a perlite mix, are too light for vegetable gardening, not offering enough support for plant roots nor enough nutrients since such mixes are sterile.
- Growing medium should be added to 1-2 inches of the container top.
- Avoid use of garden soil that can introduce disease and pests to the container environment.

Section Three: Watering BMP

Water sufficiently to allow soil to stay moistened without being waterlogged.

- Irrigate early in the morning to minimize evaporation losses, effects of wind, and to reduce the length of leaf wetness so that disease pressure is reduced
- Apply water toward the roots until it runs out the drainage holes.
- Container should not be in direct contact with drainage water collected in saucers.
- Container should not have standing water or be soggy on top.
- Containers dry out quickly because the volume of soil is relatively small, therefore watering daily or even twice daily may be necessary.
- Mulching and wind breaks help reduce water requirements for containers.
- Research has indicated that use of water-absorbing polymer products has limited benefits.

Section Four: Fertilizing BMP

Use slow release fertilizers to supply sufficient nutrients over an 8-10 week period before reapplying.

- Container grown plants do need fertilizer.
- Soil mixes with fertilizer added supply enough nutrients for eight to ten weeks.
- “Slow-release” fertilizer supplies additional nutrients with minimum labor.
- Follow product recommendations with fertilizer use.
- Do not add more than the recommended rate of any fertilizer.

Section Five: Right Plant Right Place BMP

Take advantage of microclimates and specific growing conditions to choose plants that will be appropriate for that site

- Match plantings in a container based on their cultural needs (light and water).
- Use native plants.
- Microclimates on patios, decks, balconies, steps, etc., should be evaluated when selecting plants.
- Select vegetables based on the hours of sun vs. shade in a specific location.
- Grow vegetables based on realistic space constraints.

Section Six: General Maintenance/Care

Learn which insects and diseases are common to the plants growing in your containers and inspect periodically for the presence of foliage or fruit-feeding insects or for a disease.

- Be aware the most common problem with containers is too little or too much water.
- Place containers on plant “feet” or pallets to allow air movement beneath the container.
- For ease of care, dollies or platforms with casters can be used to move containers from place to place.
- To avoid plant damage later, install vertical structures early to accommodate climbing plants and vegetables.
- Routinely empty any container saucers to avoid root rot, excess salt buildup, and mosquitoes.
- Use hand removal of pests and regular cleanup of foliage to reduce use of pesticides/herbicides, etc.

Section Seven: Overwintering

Protect pots and overwintering plants in them from fluctuating temperatures by bringing them indoors or into an unheated garage for protection.

- Be aware that the container temperature will be the same as the ambient temperature.
- The least hardy portion of the plant is the roots.

Credit: VA Tech Cooperative Extension