

Container Gardening

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Funding, assembly, and printing of these workshop materials was made possible by University of Guam (UOG)/ Cooperative Extension Service (CES)/ New Farmer Program, United States Department of Agriculture (USDA)/ Western Sustainable Agriculture Research & Education (WSARE), and Children's Healthy Living (CHL) Program.



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Overview

- **What is Container Gardening?**
 - Advantages
 - Disadvantages
- **Types of Containers**
- **Tips for Selecting Containers**
- **Growing Media**
- **Types of Growing Media**
- **Plant Care**



What is Container Gardening?

- The practice of growing plants exclusively in containers.
- It can be an alternate way to explore the challenges of growing fruits, vegetables, herbs, and ornamentals.
- Containers hold and support the growing medium.



Advantages

- A gardening alternative where there is:
 - Poor quality soil
 - Limited space for growing plants.
 - Problems associated with soil borne diseases or plant parasitic nematodes
- Plants in containers are portable
- Able to alter the media to meet the soil requirements for the plant to grow.



Disadvantages

- The medium in containers will dry out quickly.
- Plants will require more frequent fertilization.
- Containers are easily knocked down or blown over.
- Growing plants in containers can be expensive.



Types of Containers

- Almost any type of pot/container can be used:
 - Plastic (bags or pots)
 - Food Grade Buckets
 - Ceramic
 - Concrete
 - Metal
- Size of container will vary according to plant selection and space available



Types of Containers

Plastic Pots



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Types of Containers

Bags



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Types of Containers

Buckets



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Tips for Selecting Containers

- Containers must:
 - Have holes for drainage
 - Be selected based on the size/needs of the mature plant
 - Not have held materials or substances that are toxic to plants or humans.
- For wood containers: Use rot-resistant wood
 - Caution: wood containers break down fast and treated wood has toxic chemicals



Growing Media

- Growing media must provide
 - Water
 - Nutrients
 - Sufficient drainage
 - Physical support
- A variety of media can be used, such as a low-cost mixture using compost or fine mulch and coral sand.



Growing Media

- Any one or a combination of the following can be used:
 - Soil
 - Organic material (compost, mulch, potting mixes)
 - Sand
 - Perlite and vermiculite
 - Water



Soil

- Naturally occurring material from weathered rock and organic remains covering the land
- Advantages:
 - Abundant
 - Relatively inexpensive
 - Has most of the requirements for plant growth
 - Its weight helps stabilize containers
- Disadvantages:
 - May contain weeds and weed seeds,
 - Plant diseases
 - Harmful insects
 - Physical and chemical composition may not be ideal



Organic Material

- Fresh decomposed, and decaying plant or animal material
- Sources:
 - Compost, mulch, potting mixes, manure, seaweed
- Advantages:
 - Improves soil structure and slowly releases nutrients as the material breaks down
 - Aids in water storage and aeration



Sand

- Sand is a basic component of soil ranging in particle size from 0.05mm to 2.0mm in diameter.
- Guam: Wash Manufactured Sand (WMS) is readily available.
- Advantages:
 - Weight stabilizing
 - Increases drainage/aeration
- Disadvantages:
 - Limestone composition may increase soil pH



Perlite and Vermiculite

- Perlite & Vermiculite are manufactured from rock.



Perlite and Vermiculite cont.

- Advantages:
 - Their uniformity help in aeration and drainage
 - High water-holding capacity
 - Light weight
 - Particle size can be specified
- Disadvantages:
 - Dusty when dry
 - Tendency to float to the top of the container during irrigation



Growing Media

- Sterile, soil-less potting mixture
 - Advantages: free of plant disease, insects, and weed seeds
 - Disadvantages: higher cost, lower in nutrients, and light weight
- Combination of potting mix with local soil
 - Advantages: low cost, better water-holding capacity
 - Disadvantages: may introduce disease, pests, and weeds



Types of Growing Media



Plant Care: Watering

- Water as needed
- Water plants in containers until water runs out of the drainage holes
- Never allow the medium to dry out completely
- Never allow the medium to be water-logged



Plant Care: Nutrition

- Compost and manures are organic slow release, sources of plant nutrients.
- Chemical Fertilizers can be applied as needed, the rate and frequency is dependent on the type and composition of the fertilizer.



Plant Care: Pest and Disease

- Plants grown in containers are susceptible to the same diseases and pests common to any garden
- Check plants regularly for pests and disease
- Remove, discard or treat any infected plants



Planting Info for Container Gardening

<i>Crop</i>	<i>Pot Size (in Gallons)</i>	<i>Days to Harvest</i>
Green Onions	½ - 1	30 - 50
Pechay	½	21 - 35
Lettuce	½	30 - 35
Radish	1 - 2	24 - 30
Long Beans	1 - 2	50 - 65
Cabbage	1 - 5	45 - 60
Cherry Tomatoes	1 - 5	60 - 70
Hot Pepper	2 - 5	60 - 70
Bell Pepper	2 - 5	50 - 60
Eggplant	2 - 5	55 - 65
Cucumber	2 - 5	35 - 50
Squash	2 - 5	50 - 60
Okra	2 - 5	40 - 50



Planting Info for Container Gardening

<i>Crop</i>	<i>Pot Size (in Gallons)</i>	<i>Days to Harvest</i>
Parsley	1+	35 – 45
Basil	1+	30 – 70
Mint	1+	60 – 70
Thyme	1+	90 – 95
Dill	1+	40 – 55
Oregano	1+	80 – 90
Cilantro	1+	60 – 90



Fruit Trees and Banana in Containers



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Plants ready to Transplant into Containers for Gardening



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