Alternative Vegetable Gardening
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http://tiny.cc/tm7sx

Edibles!
Epcot, April 2010

Lots of people want to grow food, but not everyone can or will dig up the yard

New York Botanical Garden – June, 2010

Soil / Site Issues
- Poor soil
- Soil pests
- Trees
- Limited space
- Deed restrictions
- Love the lawn!

Human Issues
GROW DAMMIT!
Alternative Gardening Demo
UF Plant City Teaching Gardens

Alternative Veggie Gardens

Above the ground;
In some type of container;
In soil-less media;
All other veggie rules apply.

Growing Media

- Perlite
- Vermiculite
- Gravel
- Sand
- Sawdust
- Bark
- Rockwool
- Coco Fiber
- Compost
- Combinations of these
- Commercial soil mixes
- Water + nutrients

Alternative Gardening

Sunlight
Pests
Minimum of 5-6 hours
Scout frequently

Small-scale Containers

- Pots – plastic, clay, glazed
- Buckets, baskets, barrels, bags
- Grow boxes
- Vertical systems

Alternative Gardening

Advantages
- Avoid soil
- Good results
- Portable – some
- Can garden on hard spaces
- Less physical
- Great for kids and “challenged”

Disadvantages
- Expensive – some
- Assembly required – some
- Water intensive
- Limited growing space / yields
- $$$ Payback?
Containers

- 1 gal – herbs, small veggies
- 5 gal minimum – big veggies
- Provide drainage
- Stake / support

Hanging Containers

Topsy Turvy™
Heavy! – Need strong support

Other Containers

Barrels
Baskets
Buckets

Grow Bags

Plastic, mesh or felt bags. Some have handles; some come pre-filled with media.

“Lay-flat Bags”

Plastic bags filled with soil-less media

Lettuce
Onions
Dwarf Cucumbers
Herbs
Soil Bags

Grow Boxes
- Various sizes
- Use potting (soil-less) mixes
- Have a reservoir of water
- Fertilize one time (2 cups granular fertilizer)
- Keep cover on until you’re ready to replant
- Vining plants need support

EarthBox®

Grow Boxes
- Tomatoes on a rope

http://www.earthbox.com
Home-made Grow Box

- [Image]


Vertical Growing System

- Very space efficient
- Reduced disease - better air flow and less soil splashing
- Easy to harvest

- [Image]

Vertical Growing System

- Great for ‘cut and come again’ crops such as:
  - Leafy greens
  - Herbs
  - Edible flowers

- [Image]

Vertical Growing System

- Commercial kits include:
  - poles
  - styrofoam pots
  - media
  - fertilizer
  - drip irrigation
  - pump, timer
  - Transplants and nutrient tank not supplied

- [Image]

Examples of Commercial Products

- [http://vertigro.com/](http://vertigro.com/)
  - and others

- [Image]
Low Cost Vertical System
http://edis.ifas.ufl.edu/hs1186

Large-scale Containers
- Concrete blocks
- Raised beds
- Hay bales

Raised Beds
Construction
4’ wide
6-18” high, 24” for wheelchairs
Pressure treated lumber?

The American Horticultural Therapy Association
http://www.ahta.org
Raised Beds

Easy Garden Box™

Raised Bed Brackets

Hay Bale Garden

Hay Bale Garden

Filtrexx Garden Soxx™
Soil Recipe

Sample Mixture
For each bushel of soil-less media
- 1.25 cups dolomite
- 1 cup 8-8-8 fertilizer w/ micronutrients

Controlled-release Fertilizers
- Ex: Osmocote and Dynamite
- Choose products that include micronutrients
- Select release rate based on crop (i.e. 3 month, 6 month, etc.)

Hydroponic Gardening
Growing plants in water and dissolved nutrients - no soil
- Potato Box
- Floating Gardens

Raised Beds
2008 Victory Garden in San Francisco

Potatoes in Perlite
Clean & easy harvest

Round II – Sweet Potatoes

Floating Gardens
Plants “Float” on Styrofoam Bed with Roots in Nutrient Solution

Floating Garden Construction

• 2’x8’ boards used to construct 4’x8’ frame

• 6 mil plastic lining

Add Simple PVC Structures for Cold or Deer/rabbit Protection

Use any un-drained container at least 6” high
What Can You Grow?

Lettuces, mustard greens, mizuna, kale, basil, green onions, Swiss Chard, cucumber, watercress. Others?

Mix Nutrient Solution

2 tsp 20-20-20 (w/micros) or equivalent soluble fertilizer

+ 1 tsp Epsom Salt

…per gallon of water

Drill Holes in Styrofoam

- 1 1/2 inch styrofoam
- Drill or cut holes 12” apart
- Diameter of holes = size of net pots or cups

Place Transplant into Cups

Bottom of cup should extend no more than 1/8" below styrofoam

Floating Garden

35-gallon Plastic Garden Pond
Floating Garden

Go to http://vfd.ifas.ufl.edu/ for a "how to" video and more info

Choosing Varieties

• Select proven varieties
• Try dwarf/“mini” veggies
• Choose pest-resistant varieties

Transplants: Store-bought or Home-grown?

TRANSPLANTS = Faster start

SEEDS = More choice
“Bio-sponges” (sphagnum moss and composted bark)
120 - $12
Park Seed Co.

Ready for a break?

Thanks!

DISCLAIMER
Many other products exist. Mention of a company’s name/product is not intended to be an endorsement or a preference over other products.