Making & Planting Grow Buckets

Grow Buckets are sub-irrigated planters that can be used to grow a wide variety of vegetables. They are an easy and inexpensive do it yourself project. Grow Buckets use less water, are low maintenance, take little space and can be placed in any sunny location.

Materials & Tools:
- Two 5 gallon buckets for planting and water reservoir (new or used food grade). Best buckets are those with “2” symbol = high density polyethylene (HPDE).
- 16 ounce plastic cup for a wick cup.
- 24 inch piece of 1 inch PVC Pipe for the fill tube.
- 24 inch square of opaque plastic for mulch.
- Electric drill.
- 3 ½ inch hole saw, 1 3/8 hole saw or paddle bit, ¼ inch drill bit.

Drilling Instructions:
- Drill a 3 ½ inch hole in the center of the planting bucket for the wick cup.
- Drill 1 3/8 inch hole near the outer edge of the planting bucket for the fill tube.
- Drill at least 30 ¼ inch holes around the entire bottom of the planting bucket.
- Drill ¼ inch holes on two sides of the reservoir bucket allowing a ¾ inch air space between the bottom of the planting bucket and water level.
- To determine the height of the overflow holes, place the planting bucket in the reservoir bucket and measure from the bottom bucket to the wick cup hole.
- Drill ¼ inch holes in the bottom and sides of the wick cup.
- Drill several ¼ inch holes in to bottom of the fill tube to allow faster water flow.

Selecting & Preparing Soil:
- Use good quality potting soil1 cubic foot bag will fill one grow bucket.
- Soil needs to be thoroughly moistened before adding to wick cup or bucket.
Filling Grow Bucket:
- Pack the soil tightly in the wick cup.
- Place wick cup in center hole of the grow bucket.
- Place the fill tube in the side hole making sure the end with the holes is in the water reservoir bucket.
- Pack soil tightly in the bottom third of the grow bucket to avoid any air pockets.
- Mix one cup of dolomite lime in remaining soil.
- Fill the bucket and mound the soil in the center until it resembles a loaf of bread.
- Add granular fertilizer around the outer edge of the mounded soil.
- Use one cup of 8-8-8 or two cups of organic fertilizer.
- Cover fertilizer with a thin layer of soil.

Planting Grow Bucket:
- Cut a hole in plastic mulch for the fill tube.
- Cut a small hole in the center of the mulch for the plant.
- The mulch can be put in place before or after planting the plant.
- Secure the mulch around the bucket with the rubber ring from the bucket lid or twine.

Watering Grow Bucket:
- Water using the fill tube until water begins to seep out of overflow holes.
- Small new plants will need to have water added every two to three days.
- Mature plants may need water added daily.
- Rain does not water grow buckets because of the plastic mulch.
- The wick cup can only maintain moisture, it cannot water a bucket that has been allowed to dry out.
- If a bucket does dry out, lift the plastic mulch and gently add water to remoisten the soil in the grow bucket.

What to Plant:
- Don’t overcrowd the bucket.
- One eggplant, okra, pepper or tomato.
- One bush squash or cucumber.
- Two vining squash or cucumber plants.

Tips:
- A stake or a trellis may be needed to support tall or vining plants.
- Once season is completed, materials can be reused. Replace with fresh soil.

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