

Sub Irrigated Bucket Planters

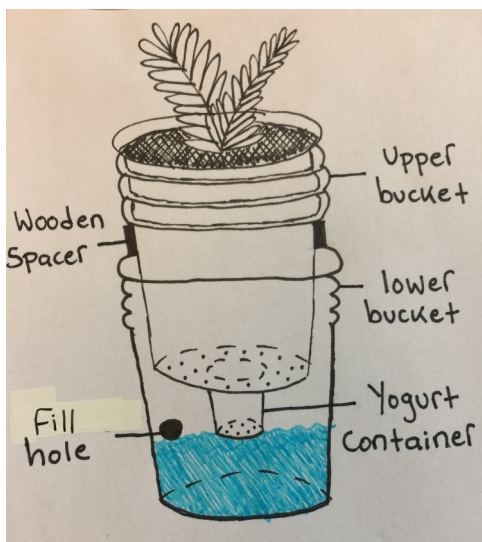
Being able to grow your own healthy container plants on balconies and patios is a pure pleasure. When plants have access to all the water that they need, consistently, they will be stronger, healthier and will produce a greater abundance of produce. You can build a planter yourself that will achieve this! This factsheet describes how to make a Sub Irrigated Bucket Planter for growing in, out of two stacked, recycled buckets. Read on to find out how!

Why it works

Through capillary action soil is able to draw water up to plant roots. When plants have access to the water that they need at all times, they are able to move nutrients from soil to plant, and the plant doesn't experience heat or drought stress.

When growing in a Sub Irrigated Planter, compared to a regular pot, you can expect:

- Larger, healthier plants.
- More abundant crops.
- Less watering work.
- Ability to go away for the weekend without worrying about watering your plants!



Step 1: Prepare your buckets

- Hold one bucket up to the lower rim of the other one and measure the lower space created between them: measure between the bottom of the upper bucket, and the bottom of the lower bucket. This is the space that will be the water reservoir, and where the yogurt container will hang. (see photo)
- Add 1cm to this measurement to accommodate for the thickness of the plastic and the amount of space between the ground and the bottom bucket.
- On the yogurt container, measure this height from the base upwards. At this height, measure the circumference using a marker and string. Cut the string to size.



What you will need:

Materials	Tools
<ul style="list-style-type: none"> • Two nestling 5 gallon food grade buckets • One 500mL yogurt container • 2 pieces of 2" by 1" wood, about 2 inches long, scrap wood (for spacers, only needed in some instances) 	<ul style="list-style-type: none"> • Strong / sharp box cutter • Drill • Ruler/soft measuring tape • 7/8" or 1" flat bit or auger bit • 1/8" Twist drill bit • 3/16" Twist drill bit • Four 5/8" screws (for spacers, only needed in some instances) • Marker & string

Note: If the height you measure is less than 3/4 the total height of your yogurt container, you will need to use wood spacers between the buckets to elevate the top one further. If the height is more than 3/4 that of the yogurt container, you may not need the spacers (see step 3 for details on the spacers)

Step 2: Cut & Drill holes

- In the centre of the bucket, trace a circle using the circumference you determined with the string.
- Cut this hole using the box cutter.
- Drill drainage holes around the central hole using the 3/16" drill bit



- If you've determined the wooden spacers are necessary, drill pilot holes in the wooden spacers and the buckets just below any bucket lip grooving on the side of the bucket, under the handles.
- Drill holes in the bottom of the yogurt container with the 3/16" drill bit.



Step 3: Attach wood spacers

- After drilling your pilot holes in the wood spacers in Step 2, fasten your wood spacers into place with a screw to effectively raise the upper bucket higher out of the lower bucket.



Step 4: Drill fill hole

- Nestle your buckets together with the yogurt container in place.
- Determine where the upper bucket base sits, by shining a light through your buckets or estimating.
- Drill a fill hole in the bottom bucket using your flat/auger bit about 1cm below where the upper bucket base is located.



Step 5: Add your potting mix and plant your seedling

- Stack your buckets with the yogurt container in place.
- Fill the upper bucket (including the yogurt contain-

- er) with moist potting mix and plant your seedling.
- Fill the water reservoir and voila!

Best Practices for using your Sub Irrigated Bucket Planter

- Heat loving plants like tomatoes, peppers and eggplants appreciate this type of pot.
- Use a potting soil with lots of aeration to keep the soil from compacting, and in turn encourage the capillary action in the soil to function well. Look for a mix with perlite, coconut coir or vermiculite.
- You won't be able to overwater your plant, as the plant will effectively choose when it soaks up water. However, make sure that the bottom water reservoir stays full.
- Bigger plants use up more water, quicker so you'll have to fill the reservoir more often.
- If you want to start seeds in your planter, then you must keep them moist from above until they germinate and are well established. Planting seedlings is more highly recommended.



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