

Gardening Basics

Olla Irrigation

Olla (pronounced “OY-yah”) means pot in Spanish, but ollas were used for irrigation in Africa, Asia, and the Americas long before the Spaniards came to those areas. Ollas reduce the frequency of hand-watering plants by serving as reservoirs that slowly release water and promoting deep, strong root growth. Because the water stays below the soil surface and is in a covered container, there is little loss from evaporation. The soil surface remains dry, limiting weed germination.

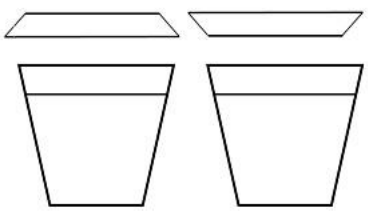
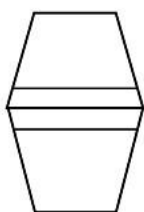
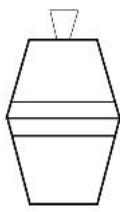
Artists and commercial vendors make and sell beautiful ollas that work well but can be expensive. If purchasing ollas with narrow necks, measure the opening if you want to use a bottle as a reservoir. Gardeners can make their own ollas using clay pots and saucers, plus spare tiles, pottery shards, some type of sealer, and adhesive. There are many styles of homemade ollas, but basic instructions are similar for all.



1"Olla In Hole" by Earthworm is licensed under CC BY-NC-SA 2.0.

First, decide on which size clay pot best suits your needs. A general rule is that an olla will water an area twice its mid-height diameter. A clay pot 10” at the top typically has a 6” base. That pot’s mid-point diameter is 8”, so water will spread out to a circle about 16” around the pot. If using ollas in established plantings, be sure they are close enough to the plants. If establishing new plantings, sketch out the placement of ollas within your planting design to make sure the plants are within the ollas’ ‘water circle’.

Decide which style and size of olla suits your needs.

		
Simple	Stacked – buried deeper, covered with saucer	Stacked – buried deeper with stopper or bottle as reservoir

Supplies, Adjust According to Style

Clay pot (Recycling used pots is ok but must be clean)
 Glazed or unglazed clay saucer to cover the pot
 A piece of tile, broken pot, or other flat object to cover the hole in the pot
 Waterproof adhesive or caulk

Tape
 Sealer such as paint or varnish – sprayed or brushed on
 Paper to cover work surface

Process

Cover the work surface.

To seal the bottom hole to prevent leaks, place adhesive or caulk around the hole inside the pot.

Press a tile, stone, or other flat object into the adhesive to seal.

Let dry 24 hours.

Cover the inside and outside of the pot with paper secured with tape but leave the upper edge of the pot uncovered that will extend above the exposed soil line – approximately 2”.

Apply sealer around the exposed edge, inside and out. Several thin coats work best.

Apply sealer to clay saucer inside and out. Skip if using glazed saucer.

Let dry 24 hours.

Remove paper and fill pot with water to test for leaks. If leak is around bottom hole, caulk around the tile, etc.



"Olla Buried" by Earthworm is licensed under CC BY-NC-SA 2.0.

Installation

Dig a hole deep enough for the sealed edge of the pot to extend above the soil line, making the hole wider than the top diameter of the pot.

Insert the pot in the hole and level it.

Cover with the saucer or insert stopper or bottle, and fill in the soil around the outside of the pot.

Brush away any soil from the cover, remove it, and fill the pot with water.

Replace the cover or insert stopper or filled bottle.

- Monitor the pot at least every other day. Refill pot or bottle as needed.
- Be prepared to hand water new plants for a couple of weeks until their roots extend to the olla's water circle.

Resources

Nicol, Amy and Andrew Brischke, "Irrigating with Ollas", The University of Arizona Cooperative Extension, (accessed 2 March 2026):

<https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1911-2021.pdf>

"Ollas", The Coastal Gardener, University of California Agriculture and Natural Resources, (accessed 2 March 2026):

<https://ucanr.edu/blog/coastal-gardener/article/olla-irrigation>

Texas A&M AgriLife Extension Service provides equal opportunities in its programs and employment to all persons, regardless of race, color, sex, religion, national origin, disability, age, genetic information, veteran status, sexual orientation, or gender identity. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating.
