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Urban Farming - Lesson 12
Plants Need Water

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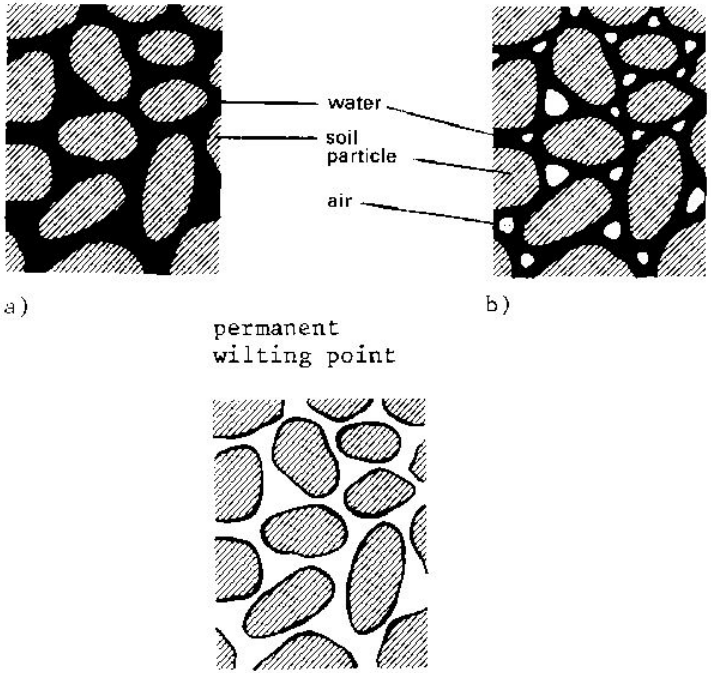
How much water

Roots need water AND air.

You want soil where the soil particles are coated with humidity but not where the soil is so saturated with water that the the roots have no access to air.

You also don’t want the soil particles so dry that the the plant wilts.



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Choose what works for you

There isn’t a single method for irrigating as it depends on your personal choice and needs. However there are some new irrigation practices that make irrigating easier and can save a lot of water.

For some plants you may just prefer using a watering can.

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Direct water or collected?

The best water to use is rainwater. This can easily be collected by attaching a water tank to the rain gutter coming down from your roof. You can use barrels or larger containers according to the space you have available. Ideally you would like the tank at least 3-6ft high to have a little pressure and also needs a filter.

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Timer

A timer is useful to do your watering. When purchasing remember to check if it works for high pressure or low pressure water source.

Low pressure is from a tank and high pressure is from a tap. There are also timers with pumps in case you have a tank directly on the floor.

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Drip irrigation

Our personal experience has led us to prefer drip line over a soaker hose.You will want to have a plain hose running down the beds and then the drip hose connecting to the plain hose.

Control water output by choosing dripline spacing that matches your needs or close holes with duct tape.

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Adjustable Nozzles

With adjustable nozzles you can ensure each pot or bed is getting the water it needs. An easy way to calculate the water is to put a bucket under the nozzle and see how much drips out in an hour. This will allow you to determine if you are giving too much or too little water.

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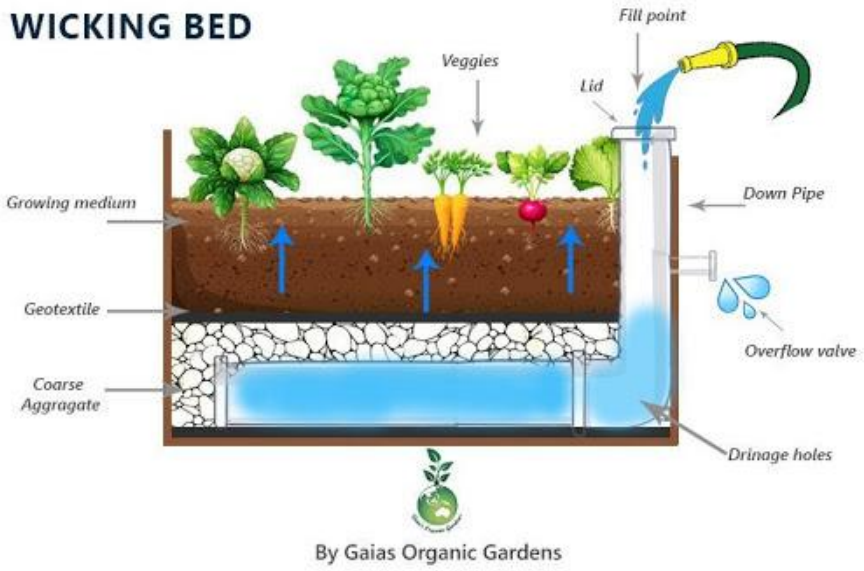
Wicking bed

With a wicking bed you have an underwater reservoir and the plants absorb the humidity they need.

Down side to this it a risk of root rot and less flexibility in managing the amount of water the plants get.

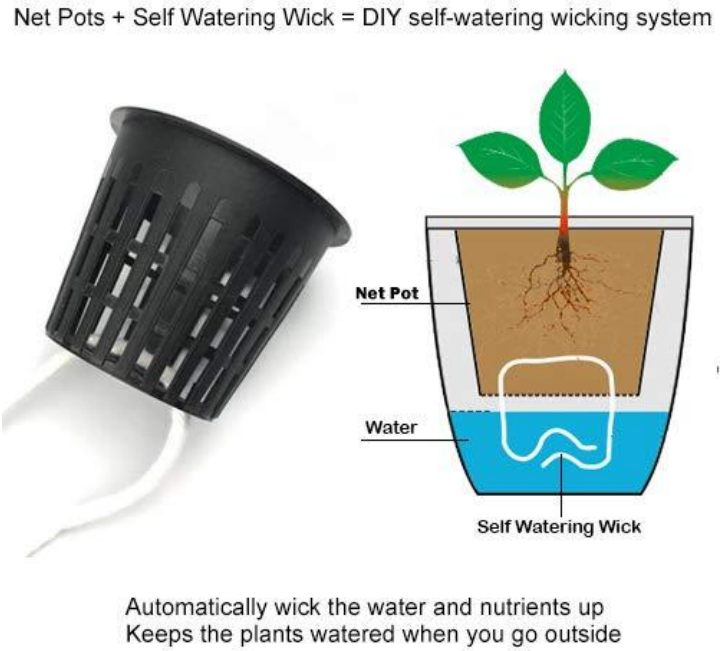
However does save time and water if you can find a good balance.



Net pot and wick

Definitely a good system for single indoor pot plants. Less effective for outdoors because if it rains the whole vase will fill with water and drown the roots.

The wick may have to be more than what is seen in the image (6-8 strands)



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Wicking alternative

You can also have the bases of larger beds cut out and insert a basket with moss, biochar, volcanic rock or other wicking material. Then sit the base on a water filled gutter.

Best to do these systems in basket and fabric rather than airtight vases (to avoid rotting)

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Examples of water gutter based wicking systems

Note: the milk crate beds designed in this series are suitable for wicking irrigation

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Watering hose

If you are just starting out you may prefer to hand water a while for the flexibility of being able to move the beds around and also spend a little time each day observing your plants.

When you feel all your plants are in a good spot for exposure and you have understood their needs you can timer it.

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The next lesson explains protection from animals, bugs and fungi....

If you have any questions please write to us in the Facebook Group

https://www.facebook.com/groups/LocalCarbonNetwork

or keep an eye out for our newsletter as we often arrange free online Q&A sessions on ZOOM

or see our FAQ, Articles and videos on the website https://localcarbon.net/

Thanks!