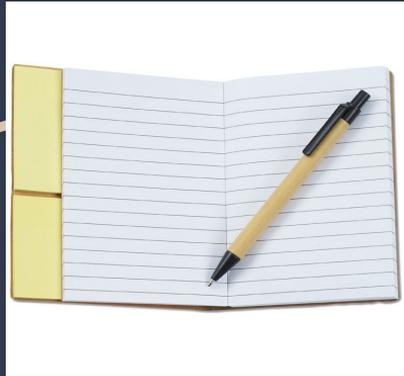


Indoor and Outdoor agriculture research benchmark

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What will be going over...



- Definitions
- Planting History
- Planting Methods
- Pro's and Con's
- Materials

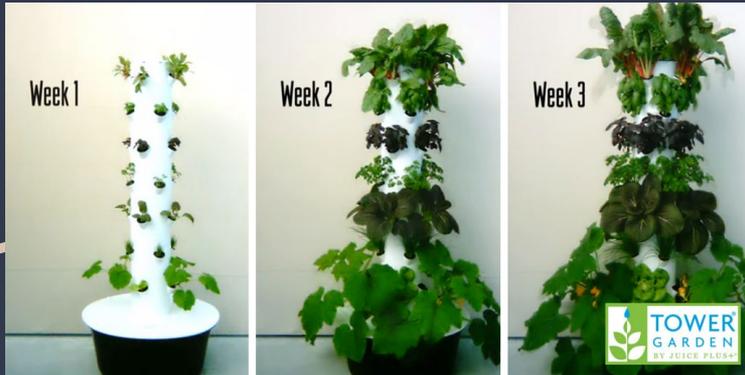
Definition explanation of indoor and outdoor plants...?



Outdoor landscaping: Is an gardening planned space, usually outdoors set for display and cultivation and enjoyment of plants, fruits vegetables and nature

Indoor gardening: Is an artificial environment inside and facility also indoor gardening refers specifically to the growing of vegetables or herbs inside an enclosed structure

Indoor Plants History Research :



Indoor tower gardening: Are plant environments that are within doors. Within indoor gardening you need to make sure specifically that you have good enclosed structure space for the garden to grow vegetables fruits and herbs to expand.

- Find the Idea Location- for space for about 2 sq. ft. Indoor tower gardens according to the source can almost fit anywhere
- Light- For productive indoor garden most plants need about 6-8 hours of full sun or 14-16 hours under growing LED lights
- Water- Tower Gardens need water and nutrient solutions instead of soil to grow the plants, a nearby source for clean water would not be healthy but critical for the plant. It's best to not use softened, heavily chlorinated water
- Electricity- You need electricity to run the pump of water and lights when your doing indoor growing gardening towers
- Pick your plant quantity and arrange them around the garden tower

Outdoor Plants History Research :



Outdoor Urban gardening: Are plants within outdoor environments. Within outdoor gardening you need to make sure the plants have a good expanded space to grow.

-Pick Place - Almost all herbs, vegetables, fruits need six hours of full sunlight each day, choose they need to be in good spot with sun and a bit of shade

- Clear the Ground- Get rid of the surface of the ground where the grass grows where you plan to plant your garden, take and spread out 3 layers of compost

- Improve Soil- Needs 2-3 inches of compost, decayed leaves, grass clippings, and manure on the surface

- Dig or don't- Dig and loosen the soil so the roots can penetrate inside easily, digging within the soil when it is too wet or when it's dry will damage the soil. Dig when the soil is moist loose enough to drop

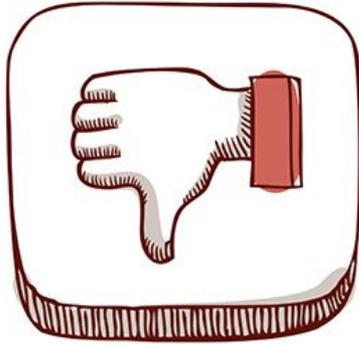
- Pick your Plant- choose plants that are adaptable to the climate, soil and sunlight in your environment in your garden, read the seed packet information before opening them to see how far you need plant them and how dig to plant them. Before you start plant you need to buy containers or flats designed especially for seedlings, as well as seed-starting soil mixes and keep them moist.

-Water- Seedlings should never dry out, they need to be watered daily each day, so the plants can be established strongly depending on your soil, humid and climate so the plant won't wilt and die

- Mulch- To help keep weeds out and water in, cover the soil with a couple of inches of mulch. All sorts of mulch are available, from pine needles to cocoa hulls to bark chips. For a vegetable garden or bed of annuals, choose a mulch that decomposes in a few months.

- Keep up the Work- Keep watering your garden, keep pulling out weeds before they grow big Fertilize with a dry fertilizer about halfway through the season. If you use a liquid fertilizer, fertilize every month or so.

Pro's and Con's about Tower gardening and Outdoor gardening



Indoor tower gardening:

Advantages:

- Healthier, Easier and Smarter to grow
- Can fit in any place patios, decks, porches, balconies, rooftops etc;
- Better tolerates from extreme weather
- Reduces the risk of pest and plant diseases
- Eliminate digging, weeding, tilling, watering, and getting dirty in the dirt

Disadvantages:

- Limited Growing Space- tower planter generally don't have much space to grow out and expand much
- Dries out Quickly- Some plant towers can receive a lot of sunlight which could dry out the plant easily of left in the sun longer than the time expected
- Diseases can mess up the plants production of growth

Outdoor gardening:

Pro's and Con's

Money: Planting your own vegetables can save you money, watch expenditures planting a garden can be more expensive than purchasing fresh vegetables from a farmer's market or from the grocery store.

Effect: The effort required to plant and maintain a garden can be either a pro or con, depending upon your point of view. If you enjoy the exercise and activity of working in the garden, the work is a positive aspect of gardening. The physical aspect of gardening can also alleviate stress.

Time: In this situation, gardening can be a positive activity. If you are so busy with work or other commitments that you have little spare time, the time required to tend a garden may be a negative aspect of gardening.

Land Use: Some people may have limited space for a gardening, lack of space can be a negative aspect. If you have plenty of room for a garden, space should not be a positive or negative aspect about gardening. If you have enough space you can plant your herbs, vegetables, and fruits will have enough space to expand and grow.

Selection: Many gardeners also appreciate knowing about the growing methods used to grow vegetables and whether or not chemicals were used on their produce. When you grow your own vegetables, you can decide exactly how to grow them and you know what methods you used. The selection of vegetables is usually a positive aspect of gardening.

Plant Traditional Methods for Outdoor gardening and Tower gardening...



Outdoor gardening:

- Soil and Chemicals
- Outside Sunlight
- Outside Oxygen
- Surrounding Biotic and Abiotic Life

Tower gardening:

- Perfect Location place
- Seeds
- Water
- LED Lights
- Electricity



Outdoor gardening materials:

- Gloves
- Nice Moist Soil Mixture
- Seeds or Plant trays with plants already in them
- Plant Pots to put the seeds or half grown plants
- Gardening water pot
- Rake, Hoe, gardening scoop



Indoor tower gardening materials:

- Holes and pump for water
- A reservoir gardening bowl container
- Water and Tower Tonic Chemicals
- Gloves
- Electricity and LED lights
- Timer
- Seed Starter tray and Seeds

Sources for Tower gardening and Outdoor gardening:



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