

## **WHAT IS BIOINTENSIVE GARDENING?**



With tremendous growth in the agricultural sector, substantial efforts are being made to improvise the techniques used in farming and gardening. Efforts are being made to develop organic agricultural systems, considering their health benefits to mankind. To bring this concept into action, continuous steps are being taken to implement it at a commercially large-scale.

### **Description**

Bio-intensive gardening is an advanced form of organic gardening, that aims to rebuild and maintain soil fertility through nutrient cycling. It is a commercially viable technique, which aims at diversified cropping and bio-bed preparation on small plots of land, with maximum yield. It involves harvesting a diverse range of crop varieties, that are less susceptible to pest outbreaks. This process also has monetary gains, as it preserves indigenous seed varieties and has a good crop sale value, as a result of it being completely organic.

## Plan

Biointensive methods or organic gardening was first attempted by the ancient Greeks, Chinese, Mayans, and the Europeans. It was further propagated by Alan Chadwick, who utilized Biodynamic and French intensive methods for organic farming. Today, it has gained worldwide popularity due to its benefits. A sustained layout can be implemented in your backyard garden, within a limited amount of space. Firstly, you need to focus on the various methodologies of this farming technique, and some organic gardening tips. The plan should comprise the following gradations.

- Raised Bed - Double Dug
- Composting
- Companion Planting
- Intensive Planting
- Carbon Farming
- Open Pollinated Seeds
- Carbon Farming
- Calorie Farming
- Rotational Cropping
- Whole-System Farming Method
- Technique

Biointensive gardening technique employs organic fertilizers and natural pest control materials. Before starting, make a list of fruits or vegetables that you want to grow in your garden. Go for indigenous crops, like tomato, pipino, kamote, spinach, eggplant, jack fruit, corn, papaya, sigarilyas, jute, beans, lemon grass, etc. To know the process of biointensive farming, read the following points.

Once you have selected the types of crops you want to grow, design the layout of the plot. It should be focused on maximum utilization of soil and empty spaces. Align in rectangular shape, and set in the direction of

maximum exposure to sunlight. You must know the basics of gardening before setting up a biointensive garden.

Clear the soil from weeds, thatch, grass clippings, garden wastes, bushes, etc. Now, spread the compost, organic or animal manure, on top of the soil bed. This spreading should not be more than 3 inches thick. Follow the double digging technique to prepare the soil bed. You can also sprinkle earthworms for a more fertile bed. This particular process is known as vermicomposting or worm composting.

Do not plant the seeds immediately after shoveling, wait for 3-4 days and then plant the seeds. Follow the instructions written on the seed pack and water them accordingly.

Observe the plants carefully when they start germinating. Check if they are infected by any diseases. Ensure that they are growing perfectly healthy. Prune the diseased leaves or spray organic pesticides, only if required.

You can also plant leguminous crops in between the plants for maximum nitrogen fixation. These plants have nitrogen fixing bacteria in their root nodules, which establish a symbiotic relationship between plants. This technique is also utilized in crop rotation.

Preserve the seeds once the plants are mature. The initial phase can be quite labor intensive, but with subsequent farming, it becomes easy, as re-plowing is not needed again. Ensure adherence to the cropping cycle, by creating a miniature seed bank.