



Indoor Gardens

Turn you home into a green mini-earth

Who does not wish to have an easy supply of fresh air, lots of green salads and a constant source of humming serenity at the most beautiful place on the earth – his home? Indoor gardening has come forth to make this wish spin into reality!

With the introduction of miracles of engineering and architecture in the forms of sky scrapers; and the hideous conversion of entire forest areas into huge concrete skeletons, it has now become imperative to haul the green sheet on the earth, increasingly under the safe shelters of our own living roofs. While many other guises of domestic gardening, like outdoor gardens, aqua gardens, balcony gardens and window farms have been in utility since quite some time, the ultimate utilization of spaces still remains to be embraced by a vast expanse of the populace. Indoor gar-

dening, utilizing almost all the rosy inventions of plant bio-engineering, is the latest trend and the 'in-hype' sort of gardening technique now-a-days. In this feature, we take you for a stroll in the green pastures of indoor gardens.

Getting introduced

Most people, having a glimpse of the title, would create an immediate impression that the concept of indoor gardens embodies the task of growing plants in pots inside the house. So what's so terribly new about that? True, the concept of indoor gardens might just not be that recent, but

the developments that have taken place in the core nature of indoor gardening, is a representation of the fact that green awareness is leading people to become increasingly creative about sharing their homes with the most primitive form of life – flora!

It is not just about growing plants indoors, it has become an adorable section of horticulture.

Indoor gardening includes the use of planters made of different kinds of materials and of different statures, the use of

well-developed technologies like hydroponics and the use of creatively carved concepts like living walls and living roofs. It embodies every possible planting experiment that one might like to conduct at his own home. With thoughtful irrigation systems and planting specifications, indoor gardening has become an important branch of horticultural studies.

Types of indoor gardens

Any kind of plantation that is done under the roof can be referred to as an indoor garden. It might involve pot culture, Block culture, window farming or vertical farming.

Pot culture is the simplest of all these types, the most ancient and the most convenient one to maintain. Most urban homes invariably have a few pots of home-grown salads, herbs, flowers and succulents. It is the more productive and less expensive avatar of indoor farming. One well recognized advantage of pot farming is that pots can be moved from one place to another to suit the light and air requirements of the plants that they are housing. Secondly, irrigation is not much of a problem. Plants have just to be kept well-watered, not wet of course! And that certifies a 2-time watering schedule as a perfect one. Not off late, horticultural companies have come up with different kinds of potting mixes and soil syrups to be used for different varieties of plants, depending on their nutrient requirements. These potting mixes and soil syrups contain supplements which might just be drunk up from the soil by your plant roots with excessive rapidness! Application of compost always comes handy when you go for pot farming! Pot farming, off late has embraced the more fashionable models like inverted pots, bottle cultures or simple roof hangings. In any case, a stylish pot would always be there with a space limitation of one plant per pot!

Block culture is a new introduction in the hat! It involves the use of a wall hanging or a sitting closet that contains small empty compartments embedded in it. These compartments house scoops of soil with small plantlets popping out of them. They are a beautiful manifestation of indoor gardening. They are however devils when it comes to irrigation or addition of supplements. Since they are wall suspensions in most cases, it becomes very difficult to place them in proper light conditions. The room condition also needs to be maintained optimally to avoid excessive dryness and humidity in the air.

They are more expensive than their potted counterparts since an appropriate irrigation system has to be installed. Automated irrigation systems like drip irrigation come real handy in such blocks. Nevertheless, their installation is also not free of charge unless the gardener himself is an irrigation geek. Light conditions are another head-scratching factor that requires careful delving into in order to ensure proper flowering and fruiting of the plants.

Vertical wall farming is the latest kind! It is the most beautiful and obviously the most complex manifestation of indoor farming.

Indoor vertical farming is the newest in the basket. It involves the marvelous canvassing of lush greenery on walls of living spaces.

The wall is first serrated with steel frame to prevent the direct contact of the wall with the plant roots and the subsequent rotting of the walls. Then a plastic panel is cleverly introduced. This plastic layer is covered by two felt layers that work as the medium for plant roots to hold on to. Now the good news is that soil is nowhere mentioned in wall gardens.

A wall garden functions on the principles of hydroponics. An irrigation system has to be installed that would pump nutrient solution up and spill it on the plastic covering. The solution rolls down the plastic layer, moistening the felt on its way down. The felt absorbs the nourishment that is required by the roots of the plants. Simultaneously, it takes care that the roots are not swathed in a moisture film continuously. The excess water is collected in a gutter, from where it is led back to the medium reservoir, of course after being duly recycled. It is a beautiful arrangement that is being given a practical appearance in many official and residential buildings.

Requirements of indoor gardens

Since indoor gardens involve the art of bringing the wild into tamed premises, it requires a lot of careful study before trying to grow vegetation under the roof. The first difference that a plant would face when transferred from outside is the difference in light and temperature. It is always a good idea to give considerable time to plantlets acclimatize themselves to the damper and shadier conditions at home. A week of steady acclimatization process helps plants to do considerably well indoors.

Another specification that needs a detailed study is the light requirements of

the plants that are desired to be planted. Plants do not use the light part of sunlight! They use specific wavelengths of sunlight. It is imperative that the plants to be grown indoors are given a regular and abundant feed of those wavelengths. Well, for that purpose, CFL and HID bulbs to the rescue. It has to be taken care that the bulbs are kept at a perfect distance from the leaves to ensure abundant light as well as to prevent the burning of the edges of leaves.

Light and humidity are the deciding factors in the success of an indoor garden. Too little is as deceptive as too much!

If it is the flowers and fruits you are interested in then it is better to read well about the light requirements of the plants. The hormone florigen shows maximum activity only when it is given a justifiable quantum of light wavelengths. Long-day plants need 14-18 hours of constant light while the requirement of short day plants ranges from 10 to 14 hours.

Another criterion deciding the success of indoor gardening is the humidity in the air. Plants require that the soil in which they are rested, or for that matter any holding medium, remains moist. Wetness is not at all the requirement. While most of us tend to wet the roots, the need is to moisten the surface and water the roots in such a manner that the roots are not bathed continuously in water. Many indoor plantations turn a sorry face due to excessive water.

Finally, it is the love that you put in. Give that in plenty and you would find your indoor garden just proliferate in bounty!

