INDOORSCAPING

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ABSTRACT

21st century is the generation of industrialization and corporate world, but polluted air and stress has become the two major points of distress.

The solution can be seen in indoor landscaping or interior gardening, the solution is offered by horticultural studies. Indoor landscape or also known as softscape refers to the animate (living), precisely the flora of a particular area. Since ages gardens have played important role in human history. But gardening consumes a lot of time, human effort is needed, good water facilitation as well as a good fertile area of ground is the necessity. All this seems to be impossible due to the human population explosion seen in recent years. As density of people has increased over a given area proportionately the need of clean and fresh air has also increased. Concrete jungles have flourished ferociously and the desired as well as the needed air quality has declined resulting in stress, depression and multiple respiratory diseases. Horticulture sciences has come up with very sui generis idea of interior landscaping as a solution to all problems.

Interior landscaping includes all the flora which can be grown and used to regulate all the adverse conditions for human survival. Plants not only help to the groom of interiors but also contribute to the psychological well being of humans. The goal is to create a synergetic environment for both plants and humans. In this review paper, establishment and benefits of indoor landscaping is discussed, the plants befitting interior landscape has been enlisted along with their use as per Indian subcontinent.
Keywords: Interior scaping, indoor plants, water efficient indoor gardening, aesthetic value etc.

INTRODUCTION

As per the studies conducted by NASA, 15-18 plants are recommended in 6-8 inch diameter container to clean the air in an average 1,800 sq feet house (roughly one plant for 100 sq. meter of floor space). Indoor air pollution problem exists when a small amount of air is circulated among many people present in a small area. The pollutants present inside as well as the ones coming from outer world are concentrated in a small tight area resulting in various health issues. As per the studies around 3.8 million people die ill timed death accredited to the poor/ill indoor air quality. The deaths counted are 27% due to pneumonia, 18% from stroke, 27% from ischemic heart disease, 20% from chronic obstructive pulmonary disease (COPD) and 8% from lung cancer.

Indoor plant scaping has evolved as a solution to all these problems. It is the least expensive way to clean the air and keep the human bodies fresh and in healthy working state. Trees works as the air purifiers of the atmosphere and interiorscaping does the same thing but inside. These plants absorb noise as well hence help in reduction of noise pollution as well.

The Goal is to create an aesthetically pleasant and tuneful interiorscape which will be mutually beneficial for the flora and the human existence.

It is an easily accessible way for the people who have become invalid due to various reasons. Not much time and effort is required as compared to a fully fledged garden. Water scarcity has been a major issue in recent years but this needs only a small amount of water to be taken care of. Hence, needing least of resources it gives most advantage.
ADVANTAGES OF INDOOR LANDSCAPING COMPARED TO THE OUTDOOR LANDSCAPING:

1) Does not require a fertile piece of land to be grown.
2) Efficient in removing air pollution as well as pocket friendly.
3) Even the persons with disabilities can maintain it indoors without being in need to go to the courtyard.
4) Care for indoor plants is more easy and enjoyable.
5) Plants are less diseased and easier to keep alive as compared to the plants grown outside. As indoor plants are exposed to less harsh conditions and pathogens.
6) The indoor environment can be controlled so plants can flourish easily.
7) Affective way to purify air for both home and work places.
8) Gardening is relaxing.
9) The purified air improves memory and concentration as there is a good flow of oxygen to the mind.
10) They decrease stress and can enhance productivity by 12%.
11) Indoor space becomes much appealing to the eyes and mind.
12) The herbal plants can give access to a fresh produce.
13) Indoor air quality will be improved.
14) Reduces background noises and makes the place peaceful.

MISCONCEPTIONS ABOUT INDOOR LANDSCAPING:

Plants can kill at night times – This is the most leading misconception about house plants, there is no way that a houseplant can breathe your share of oxygen and kill you at night. Most of the plants respire at night ie- the intake oxygen and release carbon dioxide but overall they produce more oxygen than they consume. This reflects that the plants will only increase the oxygen rich air.

There are several other myths associated with indoor gardening:

1) Houseplants need constant water supply.
2) Bigger pots = bigger plants.
3) Misting plants increase humidity.
4) Yellow leaves means overwatering.
5) Wilting plants must be watered.
6) Indoor plants go dormant in winters.
All these are mere myths relates to indoor planting. None of them has proved to be true in many aspects.

**BENEFITS OF INDOOR LANDSCAPING:**

1) Oragic production – organic plants and their products can be easily accessible as indoor plants are safe from pests and weeds.
2) Economically beneficial – Very less financial backup is needed to grow and take care of indoor plants. Can help in reducing the grocery bill as well as money spent on herbs.
3) Gardening as a therapy – this exercise brings peace to our soul and enhances brain activity.
4) Air Quality enhancement – Increased oxygen level results in oxygen rich blood which further improves concentration and healthy mind.
5) Eco-friendly – It contributes in maintaining the sustainability of our planet. Decrease in the air pollution and less intake of polluted substances.
6) Aesthetic appeal – the plants help in reduction of background noise and create a tranquil environment. They helps to reduce stress and tension which results in better mental well being.
7) Symbolic and emotional – Carries a person to naturalistic environment as well as mentally and emotionally maintains a person’s contact with nature.
8) Architectural – it defines space and helps in maintaining privacy from unpleasant views.

**PLANTS ORGANIZATION IN A PLACE** :

There are no rules to decorate a place with plants, it's a matter of personal choice. The grouping can be done on the basis of the required aspects of the plants as noise absorbing plants must be used at a working place where background noise is constant. Herbal plants can be used at homes as their products will be available for kitchen use as well. Air purifying plants can be beneficial at both the work places and the homes.

Following table shows the sound frequency absorption by different plants :

<table>
<thead>
<tr>
<th>Plant species</th>
<th>Sound frequency</th>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Common name</th>
<th>Botanical name</th>
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<tbody>
<tr>
<td>Snake plant</td>
<td>Dracaena trifasciata</td>
<td>Absorbs various VOCs</td>
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<tr>
<td>Spider plant</td>
<td>Chlorophytum comosum</td>
<td>Eliminate xylene and formaldehyde</td>
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<tr>
<td>Lucky bamboo</td>
<td>Dracaena sanderiana</td>
<td>Aesthetic pleasure</td>
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<tr>
<td>Weeping fig</td>
<td>Ficus benjamina</td>
<td>Clears xylene</td>
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<td>Areca palm</td>
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<td>Sucks toxic VOCs</td>
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<td>Baby Rubber Plant</td>
<td>Peperomia obtusifolia</td>
<td>Flowers helps in destress</td>
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<tr>
<td>Pothos</td>
<td>Epipremnum aureum</td>
<td>Absorbs xylene. toluene, benzene</td>
</tr>
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<td>Anthurium andraeanum</td>
<td>Reduces ammonia conc.</td>
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<tr>
<td>Grape ivy</td>
<td>Cissus rhombifolia Vahl</td>
<td>Maintains oxygen level</td>
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<td>Croton</td>
<td>Codiaeum variegatum</td>
<td>Colors soothes mind</td>
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**BEST SUITTED INDOOR PLANTS AS PER INDIAN SUBCONTINENT:**

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**CONCLUSION:**

Indoor landscaping has emerged as new way to a healthy lifestyle in polluted indoor environment. Lot of development has been made in this step and a lot is being made. Plants can be used a remedy against all the odds of humanity ie- mental stress, illness, respiratory and other diseases. Indian subcontinent has a variety of atmospheric conditions favouring various indoor plants without any need of controlling the environment. Indoor landscaping is the best way out to the healthy lifestyle and a good mental health.
REFERENCES:

- Interior Plantscaping – Richard L. Gaines, AIA
- The Indoor Garden – Margaret K. Hunter, Edgar H. Hunter, AIA
- Paul Cooper landscape architect - Interiorscapes