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Indoorscaping: Cultivating Health and Happiness

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"No occupation is so delightful to me as the culture of the earth, and no culture comparable to that of a garden"

Thomas Jefferson

Abstract

In the dynamic landscape of modern living, the concept of "Indoorscaping" emerges as a transformative approach to integrate nature into our indoor spaces. Rooted in biophilic design principles, Indoorscaping goes beyond mere aesthetics, aiming to create thriving ecosystems within the confines of homes and workplaces. More than just a visual enhancement, Indoorscaping offers a plethora of health and wellness benefits. Scientific studies underscore its capacity to improve indoor air quality, reduce stress levels, and enhance overall productivity. As a holistic approach to well-being, Indoorscaping transforms indoor environments into sanctuaries that promote physical and mental health. Nurturing happiness is an inherent aspect of Indoorscaping. The connection between nature and happiness is harnessed as individuals witness the growth and vitality of their indoor green companions. Beyond aesthetics, the cultivation of indoor plants becomes a source of joy and accomplishment, fostering a positive and nurturing environment. In the context of sustainability, Indoorscaping aligns with the global movement towards greener living. Indoor plants contribute to air purification, oxygen production, and sustainable practices. Embracing Indoorscaping signifies an active commitment to a more sustainable and eco-friendly future within the confines of personal spaces.

Introduction

The presence of fresh flowers and greenery in our surrounds has been unequivocally associated with a clean, verdant, healthy, and joyful environment. During the COVID-19 pandemic, many people found solace and relaxation by engaging in indoor gardening at home. This activity not only helped to maintain a positive state of mind, but also provided emotional comfort and created a stress-free and joyful environment. Flowers symbolize the genuine charm of nature, embodying the beautiful and positive elements of life. As a result, they have long been linked to advancement and success throughout history.

Albert Einstein aptly stated, "By delving into the intricacies of nature, one can gain a superior comprehension of all things." Engaging with flowers and plants, whether through observation or direct involvement, has the potential to enhance indoor surroundings and exert a profound impact on human attitudes, behaviours, and physiological reactions. This influence extends to the realm of health and happiness, yielding significant benefits. Moreover, as stress-related diseases become more prevalent in work environments due to

contemporary high-tech lifestyles, there is an increasing need to enhance the connection between plants and human well-being.

Indoorscaping refers to the deliberate and skillful process of creating, organizing, tending to, and cultivating indoor plants within enclosed spaces. Indoor cultivation is possible for a diverse selection of plants that possess decorative foliage and are capable of flourishing in environments with limited exposure to light. These plants are highly esteemed for their diverse combinations of colours and patterns in their leaves, as well as their overall plant forms and styles. City dwellers living in compact apartments can utilise these plants in several ways such as container gardening, window-box gardening, growing in hanging pots, balcony gardening, and more.

Indoor plants

Indoor plants are specifically cultivated and chosen to thrive in indoor environments with consistent temperatures and low levels of light intensity. A diverse range of plants, including spreading type palms, upright varieties, as well as climbing and trailing types, can thrive when cultivated indoors.

Palms: *Chrysalidocarpus lutescens* (Areca palm), *Caryota urens* (Fish tail palm), *Chamaerops humilis*, *Howeia*, *Phoenix*, *Rhapis excelsa*, etc

Bushy and Upright: *Aglaonema*, *Araucaria heterophylla* (Christmas plant), *Cycus*, *Cordyline*, *Ficus benjamina*, *Ficus nitida*, *Maranta*, *Beaucarnea guatemalensis* (Noleno), *Dracaena*, *Fittonia*, *Dieffenbachia*, *Caladium*, *Schefflera*, etc.

Climber: *Monstera*, *Hedera helix*, *Philodendron*, *Asparagus plumosus*, *Ficus pumila* etc.

Trailing types: *Pilea*, *Setcreasea*, *Portulaca*, *Zebrina*, *Episcia*, *Ivy*, *Peperomia* etc

Ferns: *Adiantum*, *Asplenium*, *Nephrolepis*, *Pteris cretica*, *Rumohra adiantiformis* (leather leaf fern) etc.

Small types: *Ophiopogon*, *Dienella*, *chlorophytum*, etc

Cactus: *Aporocactus*, *Opuntia*, *Echinocactus*, *Chamaecereus*, *Zygocactus* etc.

Succulents: *Agave* (dwarf), *Aloes*, *Crassula*, *Echeveria*, *Haworthia*, *Sempervivum* etc.

Flowering plants (for balconies and rooftop gardens): *Adenium*, *Kalanchoe*, *Chrysanthemum*, *Begonias*, *Geranium*, *Pentas*, *Vinca rosea*, etc.

Indoor Plants for Improving Health: Indoor plants have a substantial impact on the indoor environment, leading to good effects on human health, both directly and indirectly. Scientific research have indicated that being close to nature or plants is associated with beneficial health results in humans. These outcomes include less discomfort, decreased reliance on pain-relieving medications, and faster recovery after surgery. Patients have exhibited decreased heart rates and blood pressure, reduced weariness and anxiety, and demonstrated rapid recovery from illness. In addition, Sick Building Syndrome (SBS) can be seen in modern concrete environments due to issues such as poor air quality, high background noise, and insufficient regulation of light and humidity. However, this problem can be resolved by incorporating plants indoors.

Below are some widely recognized effects of plants on human psychology and health:

For freshness: Plants enhance interior air quality by increasing amounts of oxygen. Individuals experience heightened emotions. Exhibiting a lively and energetic demeanor when in the presence of plants in the vicinity. By avoiding tedium and indolence and somnolence. for freshness: Plants enhance interior air quality by increasing amounts of oxygen. People have cheerful emotions. Exhibiting a lively and energetic behaviour when in the presence of plants in the vicinity. By avoiding dullness, laziness and fatigue

Stress reliever: Close proximity greenery enhances our emotional well-being which makes comfortable with our environment and contributes to our emotional well-being

Convenience. Plants possess the characteristic to reduce blood pressure due to their ability to alleviate stress, Gather a sense of pleasure and promote tranquilly and serenity

Optimism. Viewing plants Early in the morning People experience a sense of positivity, which uplifts our mood. Readiness for everyday responsibilities.

Alleviating Headaches: Indoor Plants increased oxygen levels and decreased the atmospheric concentration of carbon dioxide. this reduces the headache

Allergens: Indoor plants raise the amount of humidity reducing dust and thereby minimise Allergies caused by airborne substances such as Dehydrated and irritated skin with an allergic reaction. In addition, vegetation act as a natural humidifier and help in preserving Indoor humidity level that provide relief from Pruritic dermatitis

Indoor Air Quality-Enhancing Plants: According to the 2018 report from the United States Environmental Protection Agency (USEPA), individuals residing in metropolitan regions unknowingly spend the majority of their time indoors, approximately 85-90%, and are continuously exposed to air pollution. The World Health Organization (WHO) has identified indoor air pollution as one of the top five threats to public health.

In 2016, the Institute for Health Metrics and Evaluation (IHME) reported that around 2.6 million individuals died prematurely due to illnesses caused by household air pollution. Plants possess the ability to cleanse, rejuvenate, and enhance the quality of air in our residences and workplaces, protecting us from the detrimental impact of prevalent pollutants such as ammonia, formaldehyde, and benzene. Indoor air contaminants largely stem from construction materials, human activity within the structure, and the intrusion of outdoor air. Indoor air contains several types of pollutants, such as volatile organic compounds (VOCs), particulate matter, ozone, and biological contaminants.

Plants eliminate VOCs (Volatile Organic Compounds) from indoor air by absorbing them through their stomata, as well as through absorption and adsorption onto their surfaces. The following plant species have been found to successfully reduce volatile organic compounds (VOCs) such as formaldehyde (HCHO), toluene, xylene, acetaldehyde, as well as carbon dioxide (CO₂) from indoor air:

Asplenium nidus, Aglaonema brevispathum, Ficus benjamina, Ficus elastica, Hedera helix, Pachira aquatic, Nephrolepis obliterated, and Rhapsis excelsa.

In addition, the placement of indoor plants leads to a substantial reduction in the levels of carbon dioxide (CO₂) and carbon monoxide (CO) in interior environments, whether they are air-conditioned or not.

Species such as Ficus, Spathiphyllum, Diffenbachia, Codiaeum variegatum, Sinningia speciosa, Ocimum basilicum, and Yucca have been found to significantly decrease the concentration of CO₂ in lighted environments under varying temperature conditions.

Benefits of indoor landscaping in compared to outdoors landscaping

- 1) Can be cultivated without the need for a fertile plot of land.
- 2) Highly effective in mitigating air pollution while also being cost-effective.
- 3) Individuals with impairments can easily maintain it indoors without the necessity of going to the courtyard.
- 4) Caring for indoor plants is easier and more pleasurable.
- 5) Indoor plants have lower susceptibility to diseases and require less effort to maintain compared to their outdoor counterparts. Indoor plants experience reduced exposure to severe conditions and diseases.
- 6) The indoor environment can be regulated to optimise conditions for plants to thrive effortlessly.
- 7) Efficient method for air purification in residential and professional environments. Gardening is a calming activity.
- 9) The cleansed air enhances memory and focus by facilitating optimal oxygen supply to the brain.
- 10) They reduce stress levels and have the potential to increase productivity by 12%.

- 11) Indoor spaces become significantly more visually and mentally appealing.
- 12) Herbal plants provide access to fresh products.
- 13) The quality of indoor air will be enhanced.
- 14) Minimises ambient sounds and creates a tranquil environment

COMMON MYTHS REGARDING INDOOR LANDSCAPING

One prevalent myth is that plants can be lethal during nighttime. However, it is important to clarify that houseplants are incapable of depleting your oxygen supply and causing harm to you while you sleep. The majority of plants undergo respiration throughout the night, which involves the uptake of oxygen and the release of carbon dioxide. However, in total, plants generate more oxygen than they use. This indicates that the plants will solely enhance the air with a high concentration of oxygen.

Indoor gardening is accompanied by various other misconceptions:

- 1) Houseplants require a continuous water source.
- 2) Larger pots result in larger plants.
- 3) Spraying plants with mist increases the level of humidity.
- 4) Yellow leaves indicate excessive irrigation.
- 5) Watering is necessary for plants that are wilting.
- 6) Indoor plants enter a state of dormancy throughout the winter season.

The Future of Indoorscaping: A Greener, Happier Tomorrow

As the world embraces the transformative potential of Indoorscaping, its future holds promise for a greener, happier tomorrow. From residential interiors to corporate offices, the innovative venture of Indoorscaping invites individuals to redefine their relationship with nature within the confines of their daily lives. As we cultivate health, happiness, and sustainability within our indoor spaces, Indoorscaping stands as a testament to the enduring synergy between humanity and the natural world.

Conclusion

Indoorscaping encompasses the interaction with plants, both passively and actively. This interaction not only enhances the micro environment but also impacts our attitude, behaviour, and physiological responses towards others in our surroundings. Consequently, it indirectly influences our health, happiness, and work performance to a significant degree.

The inherent vitality concealed inside the serene allure of verdant flora has the capacity to establish a peaceful and calming indoor atmosphere, capable of providing solace and tranquilly amongst the demanding and hectic lives of individuals, while also serving as a means to alleviate the numerous stresses encountered on a daily basis. Therefore, the importance of indoor plants in promoting cleaner air, positive mood, enhanced attention, and overall well-being with a more relaxed lifestyle is being highlighted and emphasized.

References

1. Bergs, J. 2002. The Effect of Healthy Workplaces on the Well- being and Productivity of Office Workers. Proceedings of Plants for People International Symposium Floriade, Netherlands.
2. Conklin, E. 1978. Interior plantscaping. J. Arbopricult. 4: 73-79
3. Desai, B.L. 1961. Planning and planting designs of home gardens. ICAR. New Delhi.
4. Field and Xenia, 1965. Window Box Gardening. Pan books Ltd., London.
5. Fjeld, T., B. Veiersted, L. 1998. The effect of indoor foliage plants on health and discomfort symptoms among office workers. Indoor Built Environ. 7: 204-209.
6. Gaines, R. L. 1977. Interior Plantscaping, Architectural Record Books, New York