

# **POTENTIAL OF ORNAMENTAL PLANTS IN MITIGATING INDOOR AIR POLLUTION**

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## **INTRODUCTION**

Poor air quality is associated with health problems throughout the world due to rapid urbanization and industrialization. Urban air pollution is a matter of global health concern. Recent incidence of toxic haze which is hovering on metro cities is of great concern. It is caused by many factors which are complex and will take a long way to find proper solution. Little relief is possible if we rely on ornamental plants which can mitigate at least indoor air pollution. Indoor air is considered more polluted than outdoor environment. People spend major portion of time indoors in office, house, schools, colleges, shops. So, air quality of indoor environment is very critical for human health. As homes become more hi-tech, indoor air pollutants are easily trapped. As outdoor air enters, it mixes with pollutants derived from indoor sources such as Volatile Organic Compounds (VOC's). Volatile Organic Compounds are released from synthetic (petroleum-derived) furnishings, finishes, solvents, polished furniture, insulations, curtains, carpets, copiers and printers, and other painted household articles. Indoor air pollution is one of the important ecological threats to human health, leading to symptoms of "sick building syndrome".

## **TOXIC CHEMICALS FOUND IN HOME AND WORKING ENVIRONMENTS.**

Toxic chemicals or Volatile Organic Compounds found in home and working environments are Benzene, Trichloroethylene, Formaldehyde, Xylene, Carbon monoxide, Ammonia *etc.*

## **BENZENE**

It is a solvent present in inks, oils, paints, plastics and rubber. It is also used to make detergents and pharmaceuticals. Short-term exposure to benzene can result in irritation to eyes and skin, drowsiness and headaches.

## **TRICHLOROETHYLENE**

It is used in the dry-cleaning industry, in printing inks, paints and adhesives. Short-term exposure to Trichloroethylene can result in dizziness and nausea.

## **FORMALDEHYDE**

It is found in all indoor environments, including foam insulations, plywood panelling, synthetic fabrics, paper bags, facial tissues, napkins and household cleaning agents. Short-