



## **Indoor Plants for Cutting Down the Air Temperature and Improving the Air Condition**

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### *Abstract*

In addition to improving the aesthetic appeal of homes and workplaces, indoor plants also help to improve indoor air quality by lowering air temperature and enhancing air conditioning. Research studies have established the many advantages of indoor plants, including their ability to lower stress, increase productivity, and promote general health. This article addresses the benefits of indoor plants for lowering air temperature and enhancing air quality, emphasising the research that backs up these claims.

### **Introduction**

Indoor air pollution is a significant health issue because numerous indoor pollutants, such as organic volatile substances (VOCs), carbon monoxide, and nitrogen oxides, add to poor indoor air quality. Poor indoor air quality can cause fatigue, headaches, and respiratory troubles, among other health problems. By lowering the concentration of pollutants in the air and raising air temperature, Indoor vegetation has a substantial impact on reducing pollutants in the air and raising the quality of indoor air.

This article attempts to describe the role of house plants in minimising temperature and increasing air quality, stressing the research evidence to substantiate their use.

### **Indoor Plants for Cutting Down the Air Temperature**

Indoor plants can help reduce indoor air temperature by transpiring water through their leaves, which cools the surrounding air. The process of transpiration also helps increase indoor humidity levels, which can contribute to overall indoor comfort. According to studies, houseplants can lower the



temperature of the interior air by up to 10°F., making them an effective natural cooling system for homes and offices.

### **Indoor Plants for Improving Air Quality**

By lowering the quantity of indoor contaminants, indoor plants can also help to enhance the atmosphere inside. Plants absorb and metabolize airborne pollutants through their leaves, roots, and soil, reducing the concentration of pollutants in the air. It has been demonstrated that certain indoor plants, including aloe vera, snake plants, and spider plants, are particularly good at lowering the number of VOCs in the air.

### **Scientific Evidence Supporting the Use of Indoor Plants**

Research investigations have shown that indoor plants can help lower indoor air temperatures and enhance indoor air quality. According to a National Aeronautics and Space Administration (NASA) study, indoor plants can lower the levels of formaldehyde, benzene, and trichloroethylene contaminants in the air. Another study discovered that by lowering the number of VOCs and other indoor contaminants, indoor plants can enhance the quality of the air within buildings.

### **Conclusion**

Indoor plants have many benefits, including enhancing the aesthetic appeal of homes and offices and improving indoor air quality. By reducing indoor air temperature and improving air quality, indoor plants can help create a more comfortable and healthier indoor environment. The scientific evidence supporting the use of indoor plants in improving indoor air quality and reducing air temperature highlights their potential as an effective and natural way to enhance indoor air quality and promote overall health and well-being.

### **References**

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