



Building Air Quality

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Plants and Indoor Air Quality

Recent reports in the media and promotions by the decorative houseplant industry characterize plants as “nature’s clean air machine”, claiming that National Aeronautics and Space Administration (NASA) research shows plants remove indoor air pollutants.

While it is true that plants remove carbon dioxide from the air, and the ability of plants to remove certain other pollutants from water is the basis for some pollutions control methods, the ability of plants to control indoor air pollutions is less well established.

Most research to date used small chambers without any air exchange, which makes extrapolation to real world environments extremely uncertain. The only available study of the use of plants to control indoor air pollutants in an actual building could not determine any benefit from the use of plants.

As a practical means of pollutions control, the plant removal mechanisms appear to be inconsequential compared to common ventilation and air exchange rates. In other words, the ability of plants to actually improve indoor air quality is limited in comparison with providing of adequate ventilation.

While decorative foliage plants may be aesthetically pleasing, it should be noted that over damp planter soil conditions may actually promote the growth of unhealthy micro-organisms.