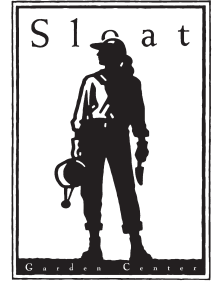


HOUSEPLANTS THAT CLEAN THE AIR



Houseplants have been shown to be effective in reducing the amount of mold, airborne microbes, and compounds, called Volatile Organic Chemicals (VOC's), in the air of our homes and offices. VOC's are commonly found in things like paint, glue, building materials, fuels, and cleaning chemicals. They include such toxic chemicals as benzene, xylene, toluene, and formaldehyde. Several studies have shown that when certain plants are present in an enclosed space, the levels of VOC's fell steadily. What follows is a list of 22 plants that are effective air cleaners, including some that have been called "super cleaners".

1. Chinese Evergreen (*Aglaonema*) – especially effective on benzene
2. Asparagus Fern – a **super cleaner**, it removes toluene, octane, terpene, and trichlorethylene
3. Bamboo Palm (*Chamaedorea*) – especially effective on formaldehyde
4. Spider Plant (*Chlorophytum*) – especially effective on formaldehyde
5. Janet Crag Dracaena – especially effective on benzene, trichloroethylene, and formaldehyde
6. Corn Plant (*Dracaena Massangeana*) – especially effective on formaldehyde
7. Dragon Tree (*Dracaena marginata*) – especially effective on xylene, toluene, and formaldehyde
8. Pothos (*Epipremnum*) – effective on formaldehyde
9. Weeping Fig (*Ficus benjamina*) – especially effective on formaldehyde, octane, and terpene
10. Rubber Tree (*Ficus elastica*) – especially effective on formaldehyde
11. Nerve Plant (*Fittonia*) – effective on benzene, toluene, and trichlorethylene
12. English Ivy (*Hedera helix*) – a **super cleaner**
13. Homalomena – especially effective on ammonia
14. Hoya – a **super cleaner**
15. Boston Fern (*Nephrolepis*) – the best for effectiveness on formaldehyde
16. Tree Philodendron (*Philodendron selloum*) – especially effective on formaldehyde
17. Heart-leaf Philodendron (*P. cordatum*) – especially effective on formaldehyde
18. Pygmy Date Palm (*Phoenix roebellini*) – especially effective on formaldehyde, xylene, toluene
19. Peace Lily (*Spathiphyllum*) – especially effective on acetone, benzene, formaldehyde
20. Lady Palm (*Rhaphis exaltata*) – especially effective on ammonia
21. Arrowhead Plant (*Syngonium*) – especially effective on formaldehyde
22. Purple Heart (*Tradescantia*) – a **super cleaner**

(See reverse side for samples of household products containing VOC's)

PLANT WATER GROW

Volatile Organic Chemicals (VOC's):

Note: While there are many types of VOC's, the following is a small sample of household items containing one or more of the toxins listed on page one. This list is far from complete. Most household item toxins are inhaled or absorbed. Houseplants are an excellent natural way to remove many particulates from the air you breathe inside your home or office.

Acetone: Rustoleum spray paints/adhesives (arts/crafts), lacquer thinner, stain removers.

Ammonia: Sealants (such as) window & door caulk, silver polish, Mr. Clean all-purpose cleaners, window cleaners.

Benzene: Non-soapy detergents, inks, ink markers, rubber cement, solvents.

Formaldehyde: Paint, building materials, school glue, insulation, wood finishes, cat shampoos, Tetra aquarium cleaners, liquid hand soap.

Octane: Scented cleaning products (such as) Clorox, Pine Sol, Lysol.

Toluene: Paint thinners, glue, arts/crafts spray paints (Rustoleum).

Trichloroethylene: Degreasers and solvent cleaners.

Turpene: Turpene alone is not harmful, but combined with other pollutants can cause toxins. It is used in scented cleaning products such as pine, lemon or orange oils (i.e. Endust no-wax cleaners, air fresheners). Terpene in conjunction with "ozone-generating devices" cause toxins, e.g. copiers, printers, air-purifiers. Also found in turpentine oil, varnishes.

Xylene: Air fresheners, odor neutralizers (such as) cat litter, Krylon indoor/outdoor paints, motor oils – spray oils (such as) degreasers, lubricants.

There is a wonderful website where you can find almost any product and a list of its properties. Go to <http://.hpd.nlm.nih.gov> for a vast list compiled by the Health & Human Resources website. You can find products by 'ingredients' or 'product name' or a variety of other headings.

Many of the VOC's listed above are in conjunction with other ingredients, turning the not-so-harmful toxin into a greater toxin (such as turpene).