SOUTHERN UNIVERSITY AND A&M COLLEGE SYSTEM AGRICULTURAL RESEARCH AND EXTENSION CENTER

Greening & Cleaning Your Indoor Air

This information provided by the Southern University Agricultural Research and Extension Center comes from NASA report Interior Landscape Plants for indoor Air Pollution Abatement, September 1989, by Dr. B.C. Wolverton, Anne Johnson, and Keith Bounds, National Aeronautics and Space Administration, John C. Stennis Center, Stennis Space Center, MS 39529-6000.

Plants Can Help Clean Indoor Air

everal common indoor plants may provide a valuable weapon in the fight against rising levels of indoor air pollution. These plants in your office or home are not only decorative, but NASA scientists found them to be surprisingly useful in absorbing potentially harmful gases and cleaning the air inside buildings.

NASA tested houseplants to absorb common indoor pollutants, such as Benzene, formaldehyde and trichloroethylene. Benzene is a commonly used solvent present in numerous substances such as gasoline, inks, oils, paints, plastics, rubber, detergents, pharmaceuticals and dyes.

Formaldehyde is found in new homes and offices. It is found in man-made building materials such us synthetic carpets, fabrics, laminated counters, and wallpaper. Trichloroethylene is found in dry cleaning products, inks, paints, varnishes and lacquers. All three of these pollutants have been found to have harmful effects on human health.

Carbon monoxide is a an odorless but dangerous pollutant often found in the home. It can result from faulty heating systems including space heaters and fire places, leaky chimneys and gas stoves. Tobacco smoke can also elevate carbon monoxide concentrations.

Peace Lily



Organic Pollutants



Gerbera Daisy



Some houseplants absorb pollutants better than others.

The following are some of the plants identified by NASA that help remove pollutants from the home environment.

| Pollutant | Source | Recommended House Plants |
|-------------------|---|---|
| Formaldehyde | Foam Insulation Plywood Particle board Clothes Carpeting Furniture Paper goods Household cleaners | Ficus Diffenbachia Philodendron Spider plant Bamboo palm Corn plant Chrysanthemum Mother-in law's tongue Poinsettia |
| Benzene | tobacco Smoke Gasoline Synthetic fabrics Plastics Inks Oils Detergents | English ivy Draceana marginata Janet Craig dracaena Chrysanthemum Draceana warneckei Peace lily |
| Trichloroethylene | Dry cleaning Inks Paints Varnishes Lacquers | Gerbera daisy Chrysanthemum Peace lily Draceana Warneckei Draceana Marginata |
| Carbon Monoxide | Faulty heaters Leaky chimneys Gas stoves Tobacco smoke | Spider plant Golden pathos |

To get you started with cleaner air at home, take a plant with you. You can choose an ivy plant or mother in law's tongue.

STEPS FOR PLANTING YOUR INDOOR PLANT.

- Select a clean pot
- Put potting soil in the bottom of your pot
- Plant your ivy in the pot
- Fill up your pot with more soil, make sure your plant is not too deep
- Put a little fertilizer
- Water your plant
- Take your plant and enjoy it