

From the Agent

Are you ready for the holiday season? Are you busy decorating your home and yard? How does decorating your home with some houseplants sound? Houseplants are the latest word in household cleaning. Research now shows that houseplants play an important role in cleaning the air we breath, both indoors and out. In this month's WET, I will give you some ideas how to control indoor air pollution. As always, you can also find more updated information on water and energy from the WET Facebook page (www.facebook.com/marionwet). I hope you find the information helpful. Thanks for reading WET.

Many indoor air pollutants are a result of volatile compounds produced inside by the structure itself, paint, carpet, furnishings, and many other sources.

Yilin Zhuang



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How to Control Indoor Air Pollution

Many people may believe that the indoor air is cleaner and healthier than outdoor air. They may presume that keeping polluted outdoor air from entering the home will help to maintain clean indoor air. Unfortunately, this is not necessarily true. The U.S. Environmental Protection Agency (EPA, 2014) indicates that indoor air can actually be more polluted than outdoor air. This is because many of our indoor air pollutants are produced inside the home, such as your home's structure, paint, carpet, furnishings, and many other sources inside the home. The worse is that if you fail to bring enough outdoor air to dilute the level of indoor pollutants, they can accumulate to levels high enough to cause health and comfort issues for the occupants.

You don't want to bring too much outdoor air in either. Many areas of northern Florida can use natural ventilation during the fall and spring months. This can also be the case in the rest of Florida depending on personal levels of comfort. In any case, levels of relative humidity exceeding 70% during long periods of time can eventually lead to mold problems, especially in stagnant air spaces like closets. Just keep a close eye on things like leather shoes in the back of a closet. These will be the first things to start to mold. If this happens, close your windows and operate your air conditioner a little bit more. Natural ventilation is a great way to save energy—just don't overdo it!

Indoor air quality has a significant impact on a family's health, especially if a family member has asthma. Do not compromise your health for immediate money savings. Here are some basic tips to control the quality of your home's indoor air and protect your household from many airborne irritants and/or health problems:

- ◆ Seal any air leaks.
- ◆ Keep your home dry (indoor relative humidity below 70%—ideally between 45% and 60%).
- ◆ Keep your home clean and free from bugs and excessive dust.
- ◆ If you use pesticides, do so only as directed in the instructions on the product labels.

In an energy-inefficient home, there is no way to control the air that enters through cracks and other openings. That air flow is affected by wind speed, topography, vegetation, and many other factors.

- ◆ When building new or conducting home improvement projects, choose products that have no or little potential health impact (e.g., little to no off-gassing of VOCs [volatile organic compounds], no formaldehyde, etc.)
- ◆ Replace your heating and cooling filters regularly with good quality, single-use filters designed for your system. If you have additional concerns about specific allergens, consult with your air conditioning contractor about filtration options more appropriate to your situation.
- ◆ Use biodegradable cleaning supplies that do not off-gas.
- ◆ If you have an attached garage or you have a fuel-fired appliance, heater, or fireplace, install carbon monoxide alarms as recommended by the EPA or the manufacturer. (“Fuel-fired” means a device that uses kerosene, propane, oil, natural gas, or wood.)
- ◆ Do not allow smoking inside your home.
- ◆ Install smoke alarms.

In addition to the above tips to control indoor air quality, research also shows that houseplants play an important role in cleaning the air we breath, both indoors and out. Plants produce their own food through a process called photosynthesis. This means they take in carbon dioxide from the atmosphere and release oxygen. Photosynthesis "cleans" our air by absorbing carbon dioxide and by taking in certain other pollutants such as benzene, formaldehyde, carbon monoxide, and nitrogen oxides. In a NASA research project, Spider plants were placed in closed chamber with 120 ppm carbon monoxide (CO) or 50 ppm nitrogen oxide (NO₂). After 24 hours, spider plants removed 96% CO and 99% NO₂. You can find more information about houseplants and pollutants removal, please visit: <http://edis.ifas.ufl.edu/pdffiles/he/he35600.pdf>. Remember, careful selection of indoor plants is necessary if anyone suffers from exposure to molds, pollens, odors, or dust. Houseplants add moisture to the environment. All the water used on the plants goes into the air. This a plus in dry parts of the country or during dry times of the year. In Florida each gallon of water added for watering plants will require about 3.5 KWh of electricity to remove. If moisture and mildew problems are being experienced in your home, plants can have negative energy and comfort effect.

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FLORIDA FRIENDLY HOMEOWNER

UF IFAS Extension
UNIVERSITY of FLORIDA

WATER.LANDSCAPE.ENERGY

WHEN:

February 2,9,16,23
9 am - 2pm

HOW:

Register on Eventbrite
or call 352-671-8400

WHERE:

Rainbow Springs
State Park -
Headsprings Pavilion

WHAT:

A 4-part series
learning how to save
time and money with
your home.

<https://rainbowffh.eventbrite.com> | \$35.00 for all 4 sessions (lunch provided)

