

**World Environment Day: Plants to beat indoor air pollution**

The Indian Express, 03 June 2018

Indoor plants are more than just adding greenery to your home. The help in purifying air in your home. Poor air quality can have both long and short-term effects like respiratory and heart disease, headache, fatigue, eye and throat problems. Hence, instead of taking risk, why not apply a simple way and opt to keep air-purifying plants at your home.

People spend a lot of their time indoors and pollution can be created through any form — from furnishings, household cleaning products, inadequate ventilation, the release of volatile gases, dust, tobacco smoke, synthetic fragrances, deodorants, insecticides and pet danders.

An easy solution for improving indoor air quality are plants — these are inexpensive and very effective. Hence, on this World Environment Day, which will be observed on June 5, let's take a look at five indoor plants to bring that freshness to your home.

Chrysanthemum

Also known as Garden Mums, this air-purifying plant helps in removing toxic pollution like ammonia, formaldehyde, benzene, and xylene. They are inexpensive and can be found at garden stores.

Spider plant

Spider plants are very easy to grow, you just need to place them under direct sunlight and put medium amount of water. This plants also help in removing pollutants like formaldehyde, ammonia, toluene and xylene.

Weeping fig

Also known as Ficus tree, this plant that can grow up to two to 10 feet tall. Plus, they are low-maintenance, you just need to water them frequently and keep under indirect sunlight. It helps in removing benzene, formaldehyde, and xylene.

Delhi Airport incorporates 35,000-strong 'plant army' to combat indoor air pollution

India Today, 07 June 2018

The plants incorporated across the premises of the Delhi's Indira Gandhi International Airport will not only eliminate indoor air pollution but also naturally moderate temperatures in a hot region like the national capital and prevent water wastage.

The airport is using a mix of foliage and flowering trees to naturally purify the air. Also, these plants are surely uplifting the visual appeal of the airport.

PLANTS INCORPORATED AT THE DELHI AIRPORT

We are going to talk about the plant species that are used at the Delhi airport and there is no simple way to mention a plant type other than its scientific name. So it might sound a bit out of the ordinary but sit tight.

The plants at IGI belong to indoor species like cassia fistula, asltonia scholaris, spider plants, snake plants, weeping fig, jacaranda mimosifolia, golden pothos and bamboo palm among others.

HOW THE PURIFYING PLANTS WILL CLEANSE THE AIR

Each purifying plant works differently. They battle specific type of pollutant particles and so the combination of these plant species is likely to clear out the airport air more efficiently.

For instance, weeping figs in general filter out the pollutants that typically accompany carpeting and furniture such as formaldehyde, benzene and trichloroethylene while spider plants combat benzene, formaldehyde, carbon monoxide and xylene.



James Hansen's legacy: Scientists reflect on climate change in 1988, 2018, and 2048

GRIST, 22 June 2018

Thirty years ago this week, NASA scientist James Hansen testified to Congress that the age of climate change had arrived.

The announcement shook the political establishment in 1988. George H. W. Bush, in the middle of a heated presidential campaign, vowed to use the "White House effect" to battle the "greenhouse effect." Four years later, with then-President Bush in attendance, the United States became a founding member of the United Nations Framework Convention on Climate Change — which still guides global climate action today.

Of course, it was not enough. Bush's actions at the time were perceived as weakening the treaty — a missed opportunity. Since 1988, global carbon dioxide emissions have risen 68 percent. At the time of Hansen's speech, fossil fuels provided about 79 percent of the world's energy needs. Now, despite every wind turbine and solar panel that's been installed since, it's actually worse — 81 percent.

Hansen's warning was prescient and his predictions were scarily accurate. Every county in every U.S. state has warmed significantly since then. Sea-level rise is accelerating, heavier rains are falling, countless species of plants and animals are struggling to adapt.

Thirty years after Hansen testified, the world still isn't even close to solving the problem. In fact, for every year we wait, we are making the problem much, much harder.

On our current path, emissions will still be rising 30 years from now, and the world will have long ago left behind all reasonable chances of preventing the irreversible tipping points in the climate system that Hansen predicted.

If climate change was an urgent problem in 1988, it's now an emergency. Looking back on what's happened in an interview with the Associated

Forests may lose ability to protect against extremes of climate change

Science Daily, 29 June 2018

Forests, one of the most dominate ecosystems on Earth, harbor significant biodiversity. Scientists have become increasingly interested in how this diversity is enhanced by the sheltering microclimates produced by trees.

A recent University of Montana study suggests that a warming climate in the Pacific Northwest would lessen the capacity of many forest microclimates to moderate climate extremes in the future.

The study was published in *Ecography: A Journal of Space and Time in Ecology*.

"Forest canopies produce microclimates that are less variable and more stable than similar settings without forest cover," said Kimberley Davis, a UM postdoctoral research associate and the lead author of the study. "Our work shows that the ability of forests to buffer climate extremes is dependent on canopy cover and local moisture availability -- both of which are expected to change as the Earth warms." She said many plants and animals that live in the understory of forests rely on the stable climate conditions found there. The study suggests some forests will lose their capacity to buffer climate extremes as water becomes limited at many sites.

"Changes in water balance, combined with accelerating canopy losses due to increases in the frequency and severity of disturbance, will create many changes in the microclimate conditions of western U.S. forests," Davis said. Other researchers contributing to the work include UM's Solomon Dobrowski and Philip Higuera, Zachary Holden with the U.S. Forest Service and the University of Idaho's John Abatzoglou.



India at bottom of 2018 global environment performance index

The Times of India, 11 June 2018

KOLKATA: Unable to improve its air quality, protect its biodiversity, and cut its greenhouse gas emissions, India – say all available data – stands today at the bottom of the Global Environment Performance Index (EPI) rankings. In 2016, the country had ranked 141 out of 180 countries. In 2018, according to the just released State of India's Environment (SoE) 2018 in Figures, it has slipped to the 177th position.

The SoE in Figures is an annual compendium of environmental statistics put together by Down To Earth magazine, which Centre for Science and Environment (CSE) helps publish. Said Sunita Narain, director general, CSE: "The State of India's Environment 2018 in Figures is a quantified statement on issues and concerns of environment and development – issues and concerns which affect us deeply. While our other annual State of India's Environment in print is a descriptive report, this one is a completely data-driven version for easy access and use."

What does the SoE in Figures say about key environmental parameters

- The state of our air: India scored 5.75 out of 100 in air quality. India's disappointing performance and the gravity of the situation is further highlighted when compared with countries such as Switzerland and Japan which have scored over 90.

Delhi is always in the news for its poor air quality. However, an analysis of the winter (November and December 2017) and summer (April-May 27, 2018) air quality levels of 10 state capital cities shows that they too are in the dangerous grip of a multi-pollutant crisis, and are currently facing a severe health challenge.

While in the summer months Delhi had 65 per cent days when poor and very poor air quality was recorded, in winters this percentage increased to 85. On only about 1 per cent of the monitored days in summer months was the air quality observed to be satisfactory in the city.

State of India's Environment (SoE) in Figures, 2018 is out

Down To Earth, 06 June 2018

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Himachal Pradesh CM launches Pollution Abating Plants Abhayan

Punjab News Express, 05 June 2018

World Environment Day was an awakening call for individuals to take charge of protecting the environment and to realize the severity of plastic usage in daily life. This was stated by the Chief Minister Jai Ram Thakur while presiding over the State level function to launch Pollution Abating Plants Abhayan (PAPA) on the occasion of World Environment Day-2018 celebrated at Government Polytechnic College Sundernagar in Mandi district today.

Earlier, the Chief Minister laid foundation stone of Guest House and of Mechanical Engineering Block Building in Government Polytechnic Sundernagar to be constructed at a cost of Rs. 1.50 crore and Rs 5.58 crore respectively.

He said that World Environment Day was the "people's day" for doing something to take care of the Earth. He said that the World Environment Day should not be a ceremonial occasion, but something concrete must come out from this. He said that environment was one of the dearest issues for the Prime Minister Shri Narendra Modi. He said that environment conservation and cleanliness must become part of our life. He said that the cleanliness campaign has become a people's movement due to awareness campaign launched by the Prime Minister. He also urged the students to come forward for environmental conservation. He said that 67.5 per cent geographical part of the State was covered with forests, but still lot more needed to be done for effective environment conservation.

Shri Jai Ram Thakur gave a clarion call to the people of the State to work collectively for making various policies and programmes initiated by the State Government a success. He said that polythene was rampantly polluting our water bodies, harming marine life and posing a threat to human health, has been one of the major concerns of environmental bodies this year.

Expert panel will be set up to use advanced technology to deal with air pollution: Environment Ministry

The Times of India, 25 June 2018

The Environment Ministry said on Monday a committee of experts would be formed to look into the technological advances, including application of satellite-based measurement, to improve air quality and reduce pollution.

Every winter smog causes deterioration of air quality, raising the pollution to dangerous levels in the national capital.

The ministry said a meeting with expert institutions was held to discuss the application of advanced technologies to deal with the rising air pollution and improve the overall air quality management framework.

"An expert group will be constituted, which will provide its recommendation in a month's time on early warning system, including dissemination protocol and application of satellite-based measurement for improving air quality information and management," the ministry said in a statement.

"The Department of Science and Technology will take lead on technology interventions for possible use before the onset of winter. They should provide the results of their assessments in two weeks, so that pilots could be quickly rolled out," it said.

The institutions that were part of the meeting with ministry officials included Satellite Application Centre of ISRO, Department of Science & Technology, Council of Scientific and Industrial Research-National Physical Laboratory, IIT Delhi, IIT Mumbai, National Environmental Engineering Research Institute, India Meteorological Department, Indian Institute of Tropical Meteorology and Bureau of Indian Standards.

The issues taken up during the discussion included use of satellite-based Aerosol Optical Depth data for estimating ground-based PM2.5 levels, establishing early-warning system and dissemination protocol to inform public and enforcing agencies about episodic high-pollution events in advance.