





Vol. 01, February 2021

# **CSIR-NATIONAL BOTANICAL RESEARCH INSTITUTE, LUCKNOW**

### News

SBULLETIN

## The

Environmenta Information System at Eco-Auditing Laboratory, National Botanical Research Institute is focussed on "Plants & Pollution". This is the E-mail Publication that Feature News, Information and Events Related to Plants & Pollution.

The Focus of ENVIS has been on Providing Environmental Information to Decision Makers, Policy Planners, Scientists and Engineers, Research Workers, etc. all over the World.

# Improving the Air Quality and Energy Efficiency of Your Home

Indoor air quality is often worse than that of the outside air. That's tragic that we may spend half or more of our time inside of our homes. Yet we consume energy trying to maintain the comfort of our homes and opening a window to let in fresh air wastes electricity. What is the solution? Here are a few tips for improving the air quality and energy efficiency of your home. Regularly changing out the air filters in the AC won't just improve your indoor air quality. It will reduce the wear and tear on the air conditioner motor, extending its life. Cleaning the vents and the condenser coil will improve the unit's efficiency. This will help you lower your energy bill while keeping cool. More importantly, it will allow technicians to inspect for coolant leaks. They can fix refrigerant leaks before **....Read more...** 

Date:February 02, 2021Source:Green Prophet

#### A plant's nutrient-sensing abilities can modulate its response to environmental stress

To survive in a changing environment, plants must choose between different response strategies, which are based on both external environmental factors and internal nutritional and energy demands. For example, a plant might either delay or accelerate its lifecycle, depending on the availability of the stored sugars that make up its energy supply. "We know plants are able to modulate their response to environmental stresses based on whether or not nutrients are available," Wang explained. "But the molecular mechanisms by which they accomplish this fine tuning are poorly understood." For years, Carnegie plant biologists have been building a treasure trove of research on a system by which plants sense available nutrients. It is a sugar molecule that gets tacked onto proteins **.....Read more...** 

Date: February 11, 2021 Source: Science Daily

#### How microplastics in the soil contribute to environmental pollution

Plastic, with its unabated global production, is a major and persistent contributor to environmental pollution. In fact, the accumulation of plastic debris in our environment is only expected to increase in the future. "Microplastics" (MP)—plastic debris <5 mm in size—are particularly problematic in this regard, owing to how easily they can be ingested by marine organisms and eventually find their way to humans. But, it is not just the marine environment that contains MP debris. Studies on agricultural soil have revealed that MPs adversely affect not only the soil quality but also the physiology of soil organisms and, in turn, the interaction between soil and plants. Still, because most studies on MPs have focused on marine environments, it is not clear how abundant MPs are in different **.....Read more...** 

Date: February 11, 2021 Source: phys.org

#### Combination of pine scent and ozone as super source of particulate emissions

Scientists have managed to figure out why conifer forests produce so many fine particles into the atmosphere. Aerosol particles are particularly abundant when  $\alpha$ -pinene, the molecule responsible for the characteristic pattern of pine trees reacts with atmospheric ozone. Atmospheric aerosol particles affect the Earth's climate by forming clouds, but at the same time they also pollute the air, thereby increasing mortality. Aerosol particles in the atmosphere have their origins in many sources. The significant amount of aerosol particles in the atmosphere is caused by the oxidation of hydrocarbon molecules produced by trees and other plants. One of the most important hydrocarbons forming particles is  $\alpha$ -pinene, that is, the molecule that causes the characteristic smell of pine trees.

Date: February 11, 2021 Source: phys.org

#### **DDA okays policy for development of green belts**

With an aim to regulate development on land in green belts and low density residential area (LDRA), the Delhi Development Authority (DDA) on Wednesday approved 'Green Development Area (GDA) Policy' to provide an integrated framework for growth. The policy will ensure seamless development of infrastructure and road network within and around the agricultural land and green belt, said DDA officials. At present, no new construction— either residential or commercial, is permitted in 47 rural villages including Mitraon, Dhansa, Tikri Kalan, Kapashera, Bijwasan and others in the national capital. The new policy, which is likely to benefit 70 villages, will allow planned development in these villages like hospitals or parks. The DDA officials said that construction is already taking place in villages, <u>.....Read more...</u>

Eco-Auditing Group is Involved in R & D on Eco-Monitoring, Environmental Impact Assessment, Eco-Friendly Models that are Technologically and Economically Feasible for Phytoremedia--tion of Polluted Lands and Polluted Waters etc.

**Date:** February 11, 2021 **Source:** The New Indian Express

#### **NEWSBULLETIN COMMITTEE**

**Executive Editor** Dr. Pankaj Kumar Srivastava

pankajk@nbri.res.in

Compiled By Mr.Sunil Tripathi, Mr. Diwakar Saini, Ms. Karishma Srivastava, Mr. Akash Tiwari

NBRI ENVIS Node: http://www.nbrienvis.nic.in NBRI Website: http://www.nbri.res.in ENVIS Cell: http://envis.nic.in Ministry of Environment & Forests: http://envfor.nic.in