



The Environmental 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.

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

News

Light pollution as a new threat to pollination

Artificial light disrupts nocturnal pollination and leads to a reduced number of fruits produced by the plant. This loss of night time pollination cannot be compensated by diurnal pollinators. The negative impact of artificial light at night on nocturnal pollinators might even propagate further to the diurnal community, as ecologists were able to show. The number of bees and other diurnal pollinators is declining worldwide -- due to diseases, introduced parasites, pesticides, climate change and the continuing loss of habitats. Now, Eva Knop's team from the Institute of Ecology and Evolution at the University of Bern, shows for the first time, that nocturnal pollinators can be affected by artificial light leading to a disruption of the pollination service they provide."...[Read more...](#)

Date: 02 August 2017

Source: <https://www.sciencedaily.com/>

Lutyens area infested with harmful particulate matter: Study

The idea that with its lush greenery and clean surroundings, Delhi's premier Lutyens zone is less polluted than the rest of the Capital may just turn out to be a myth — if the latest study by System of Air Quality and Weather Forecasting And Research (SAFAR) is to be believed. According to the findings, the Lodhi Road area has been found to be infested with a substantial presence of PM1 ultrafine particulates. These particulates are finer and potentially more harmful than the PM2.5 and PM10 particles which have a larger presence in the Capital's air in terms of volume. The study also shows that the average volume of PM1 during the summer, winter and the monsoon remains around 46, 49 and 20 micrograms per cubic metre respectively. "There has not been much focus on ...[Read more...](#)

Date: 02 August 2017

Source: : <http://www.dnaindia.com/>

Dramatic changes needed in farming practices to keep pace with climate change

Researchers investigating nutrients in runoff from agricultural land warn that phosphorus losses will increase, due to climate change, unless this is mitigated by making major changes to agricultural practices. To combat repeated, damaging storm events, which strip agricultural land of soil and nutrients, farmers are already adopting measures to conserve these assets where they are needed. These changes could include a more judicious use of fertilizer including strategies to use soil phosphorus more efficiently, or physical measures to reduce the losses of nutrients from fields. "This paper should alert policy makers and government to the help and support that farmers will need to achieve the scale of agricultural change that may be necessary to keep up with the increase in....[Read more..](#)

Date: 03 August 2017

Source: <https://www.sciencedaily.com/>

Drought-affected trees die from hydraulic failure and carbon starvation

"Droughts are increasing in frequency and severity, and their impact on plants and humans, is becoming more intense," says research co-author, Dr Melanie Zeppel of Sydney University's Charles Perkins. This matter for models used to predict climate change because plants take up a big portion of the carbon dioxide humans pump in the atmosphere. Therefore, the effect of tree death and die-off, as observed globally in recent decades, could affect the rate at which climate changes. "Trees and forests are particularly important because they take up and store a lot of this carbon dioxide, and also affect their environment in other ways." [Read more...](#)

Date: 07 August 2017

Source: <https://www.sciencedaily.com/>

Biochar shows benefits as manure lagoon cover

Manure is a reality in raising farm animals. Manure can be a useful fertilizer, returning valued nitrogen, phosphorus, and potassium to the soil for plant growth. But manure has problems. Odor offensiveness, gas emissions, nutrient runoff, and possible water pollution are just a few. New methods may reduce these negatives while potentially adding some positives: biochar covers. In addition to the inconvenience of odor, manure can release gases connected to air pollution and climate change. Methane, nitrous oxide, ammonia, and hydrogen sulfide are examples. Scientist Brian Dougherty and colleagues researched methods to reduce these negatives while potentially adding some positives: biochar covers. Biochar is plant matter, such as straw, woody debris, or corn stalks. [Read more...](#)

Date: 09 August 2017

Source: <https://www.sciencedaily.com/>

Probiotics help poplar trees clean up contaminated groundwater

Trees have the ability to capture and remove pollutants from the soil and degrade them through natural processes in the plant. It's a feat of nature companies have used to help clean up polluted sites, though only in small-scale projects. Now, a probiotic bacteria for trees can boost the speed and effectiveness of this natural cycle, providing a microbial partner to help protect trees from the toxic effects of the pollutants and break down the toxins plants bring in from contaminated groundwater. Researchers have conducted the first large-scale experiment on a Superfund site using poplar trees fortified with a probiotic -- or natural microbe -- to clean up groundwater contaminated with trichloroethylene, or TCE, a common pollutant found in industrial areas that is harmful... [Read more...](#)

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