NEWSBULLETIN

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CSIR-NATIONAL BOTANICAL RESEARCH INSTITUTE, LUCKNOW

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 Phytoremedia--tion of Polluted Lands and Polluted Waters etc.

News

Pot luck: five of the best house plants to give as gifts

There's no denying that plants bring happiness. Their ability to imbue life into any space, deliver a sense of calm and aid in productivity make them precious, thoughtful gifts. The lush beauty of indoor plants belies their important powers. The act of caring for our green friends is a hugely therapeutic endeavour. Patiently encouraging them to thrive, championing their imperfections and accepting their occasional demise is a lesson in the wonders of nature. This connection is not to be overlooked. Cultivating an in-door garden – or sharing the gift of one – encourages a greater appreciation for the natural world and teaches us to respect and nurture the very things that keep us all alive. Revered in its native home of In-dia, the Bengal fig – or banyan tree – is believed to be the tree under which Buddha sat to achieve enlightenment. These leafy giants are some of the largest trees in the **…..Read more...**

Date: December 04, 2020
Source: The Guardian

Global soils underpin life but future looks 'bleak', warns UN report

Global soils are the source of all life on land but their future looks "bleak" without action to halt degrada-tion, according to the authors of a UN report. A quarter of all the animal species on Earth live beneath our feet and provide the nutrients for all food. Soils also store as much carbon as all plants above ground and are therefore critical in tackling the climate emergency. But there also are major gaps in knowledge, according to the UN Food and Agriculture Organization's (FAO) report, which is the first on the global state of biodiversity in soils. The report was compiled by 300 scientists, who describe the worsening state of soils as at least as important as the climate crisis and destruction of the natural world above ground. Crucially, it takes thousands of years for soils to form, meaning urgent protection and restoration of the soils that remain is needed. **.....Read more...**

Date: December 04, 2020
Source: The Guardian

Microbes and Plants: A Dynamic Duo

Drought stress has been a major roadblock in crop success, and this obstacle will not disappear anytime soon. Luckily, a dynamic duo like Batman and Robin, certain root-associated microbes and the plants they inhabit, are here to help. Plants and animals have a close connection to the microbes like bacteria living on them. The microbes, the creatures they inhabit, and the environment they create all play a criti-cal role for life on Earth. "We know that microbiomes, which are the communities of microorganisms in a given environment, are very important for the health of plants," said Devin Coleman-Derr. Coleman-Derr, a scientist at University of California, Berkeley, studies how drought impacts the microbiome of sorghum. He recently presented his research at the virtual 2020 ASA-CSSA-SSSA **…...Read more...**

Date: December 07, 2020
Source: Soil Science Society of America

Climate change exacerbates biodiversity loss

A considerable number of existing and proposed post-2020 biodiversity targets by international organiza-tions are at risk of being severely compromised due to climate change, even if other barriers such as habi-tat exploitation are removed argue the authors of a study led by Almut Arneth from Karlsruhe Institute of Technology (KIT). According to their analysis published in PNAS, global warming accelerates the loss of biodiversity. Vice versa, measures to protect biodiversity may also mitigate the impacts of climate change. The authors suggest that flexible approaches to conservation would allow dynamic responses to the effects of climate change on habitats and species. About a million plant and animal species are endan-gered worldwide. At least 13 of the 17 sustainable development goals of the United Nations, however, depend on biodiversity, including species diversity, the genetic diversity **…...Read more...**

Date: December 08, 2020
Source: Science Daily

How Selfish Are Plants? Let's Do Some Root Analysis

Imagine you're a pepper plant. You need water and nutrients. Luckily, you can grow roots that grab that stuff from the soil and pipe it back to you. So far, so good. There's just one problem. Your neighbor — also a pepper plant — needs the same things. There's only so much to go around. What's your move? For years, researchers have looked into the tangled problem of root competition, coming up with diverse and sometimes conflicting findings about how plants strategically arrange their roots when the dirt gets crowded. A paper published earlier this month in Science details a new model that appears to reconcile this confusion by accounting for the spatial distribution of roots along with their prevalence. In initial tests performed by the paper's authors, real plants played by the rules the model laid **…...Read more...**

Date: December 14, 2020
Source: The New York Times

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