



News

Amritsar: 'Plant trees in scientific way to fight climate change'

Haphazard plantation of trees will not help to fight climate change but a scientific approach has to be adopted in the plantation of trees to address the severity of climate change which has been proved by the Guru Nanak Dev University (GNDU) in Amritsar whose botanical garden has 3-4°C cooler temperature than the surrounding neighbourhood. "The most effective strategy to alleviate heat stress is to increase the city's green cover, especially by planting trees in clusters rather than in rows. If trees are to be planted on both sides of the road, there should be three layers of trees to allow them to form their own microclimate and withstand harsh weather. Many tree plantation drives are noted, but the trees' long-term survival (say, after three years) is questioned", said Dr. M S Bhatti, professor of environmental engineering at GNDU.

[.....Read more...](#)**Date:** May 01, 2022**Source:** The Times of India**Land-building marsh plants are champions of CO₂ capture**

It is well known that CO₂ emissions from burning fossil fuels underlie the havoc being wrought by climate change. Stemming further emissions through innovations in sustainable energy production is certainly part of the solution. However, slowing global warming also hinges upon our ability to capture and retain CO₂ from the atmosphere. In a study published today in the journal Science, a team of researchers from the Netherlands, U.S. and Germany shows that salt and freshwater wetlands capture and store huge amounts of CO₂ through the plants that build these landscapes. The good news is that restoration of these wetlands is improving, amplifying their ability to be used as nature-based and sustainable tool for counteracting climate change.

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In 2018, an international research group bored for soil samples in three sites around the Isfjorden fjord in Svalbard, which is part of Norway. The same phenomenon was seen at each boring site: mineral soil covered by a thin layer of organic matter. In other words, this layer contains a lot of carbon extracted from the atmosphere through photosynthesis. The research group headed by researcher Minna Väliranta from the University of Helsinki has given the name "proto-peat" to such organic soil accumulations, which are composed mostly of moss formed in increasingly warm arctic climate conditions. "It's not yet peat in the actual sense of the word, but you could say it's the starting point for the formation of peat," says Väliranta, who works at the Faculty of Biological and Environmental Sciences.

[.....Read more...](#)**Date:** May 09, 2022**Source:** phys.org**Insights from algae genes unlock mysteries of plant growth and health**

"Plant and algae genetics are understudied. These organisms make the foods, fuels, materials, and medicines that modern society relies on, but we have a poor understanding of how they work, which makes engineering them a difficult task," said corresponding author Robert Jinkerson, an assistant professor of chemical and environmental engineering at UC Riverside. "A common way to learn more about biology is to mutate genes and then see how that affects the organism. By breaking the biology we can see how it works." The researchers used algal mutants and automated tools to perform experiments that generated millions of data points. Analysis of these datasets allowed the researchers to learn the functional role of hundreds of poorly characterized genes and to discover many new functions,

[.....Read more...](#)**Date:** May 11, 2022**Source:** Science Daily**International Day of Plant Health 2022: History, Significance and All You Need to Know**

Plants are the life of Earth and we all are dependent on them. How we breathe and what we eat are all affected by plants. They develop up to 80% of food for us and up to 98% of oxygen. But human habitation is harming the life of plants. Several diseases and pests kill up to 40% of food crops every year. This change is also affecting humans. To raise awareness for the safety of plants, The United Nations recently announced that May 12 will mark International Day of Plant Health. The day was promoted by Zambia and was taken into action by the UN General Assembly. The resolution under which they adopted the decision included Finland, Bolivia, the Philippines, Pakistan, and Tanzania. Human activities and climate change are highly affecting the ecosystem and harming biodiversity. People need to be aware about the drastic change and take quick action on the health of plants, for the good of both people and the planet. On International Day of Plant Health, we come together to educate each other on how protecting plants can have a huge effect on reducing poverty and hunger,

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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.