

# ENVIS - NB **ENVIS - NBRI**



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## NATIONAL BOTANICAL RESEARCH INSTITUTE, LUCKNOW

News

#### Carbon feedback from forest soils to accelerate global warming

After 26 years, the world's longest-running experiment to discover how warming temperatures affect forest soils has revealed a surprising, cyclical response: Soil warming stimulates periods of abundant carbon release from the soil to the atmosphere alternating with periods of no detectable loss in soil carbon stores. Overall, the results indicate that in a warming world, a self-reinforcing and perhaps uncontrollable carbon feedback will occur between forest soils and the climate system, adding to the build-up of atmospheric carbon dioxide caused by burning fossil fuels and accelerating global warming. The study, led by Jerry Melillo, Distinguished Scientist at the Marine Biological Laboratory (MBL), appears in the October 6 issue of Science....Read more...

Date: 05 October 2017

**Source:** https://www.sciencedaily.com/

#### Air pollution exposure on home-to-school routes reduces the growth of working memory

A study led by the Barcelona Institute for Global Health (ISGlobal), an institute supported by the "la Caixa" Banking Foundation, has demonstrated that exposure to air pollution on the way to school can have damaging effects on children's cognitive development. The study, published recently in Environmental Pollution, found an association between a reduction in working memory and exposure to fine particulate matter (PM2.5) and black carbon during the walking commute to and from school.

The study was carried out in the framework of the BREATHE project. Previous research in the same project found that exposure to traffic-related pollutants in schools was associated with slower cognitive development. The aim of the team undertaking the new study was to assess the impact of exposure to air pollution during the walking commute to school....Read more...

Date: 05 October 2017

**Source:** https://www.sciencedaily.com/

#### Alarming' rise in Queensland tree clearing as 400,000 hectares stripped

Queensland underwent a dramatic surge in tree clearing – with the heaviest losses in Great Barrier Reef catchments – in the year leading up to the Palaszczuk government's thwarted bid to restore protections. Figures released on Thursday showed a 33% rise in clearing to almost 400,000 hectares in 2015-16, meaning Queensland now has two-thirds the annual rate of deforestation in the Brazilian Amazon.

The latest Statewide Landcover and Trees Study (Slats) report showed a 45% jump in clearing in reef catchments, where 40% of all clearing took place.

The deputy premier, Jackie Trad, said the rise of 100,000 hectares to 395,000 hectares cleared was "incredibly alarming"....Read more...

Date: 05 October 2017

**Source:** https://www.theguardian.com/

### Agro-biodiversity is needed to adapt to climate change

With 60 percent of the world's caloric intake now coming from only three crops: rice, maize and wheat PIERINA BENITES ALFARO discusses what can be done to promote Agro-biodiversity and its use as a strategy to adapt to climate change. Agrobiodiversity is defined as the variety and variability of animals, plants and organisms used for feed and agriculture. The continuation of agrobiodiversity is for a large part made possible by indigenous heritage, with local communities worldwide retaining the ancestral knowledge and management of local species. However, its care provides benefits to all habitants over the world, such as protection of ecosystems and forests, pest and disease control in cultivars, human health and it is a natural strategy to adapt for climate change.....Read more...

Date: 09 October 2017

Source: http://www.theecologist.org/

#### The need to tackle London's toxic air

It is of real concern to read that nearly 95% of London's population live in areas exceeding WHO limits for particulate matter (Report, 5 October). Inner London's location, its dense road network and high buildings mean that it suffers from poorer air quality than many parts of the country. We are assisting the mayor of London by developing a low emission neighbourhood, leading a London-wide clampdown on idling engines, and banning diesel from our own fleet. We have created a City Air App, which gives low pollution travel routes to over 20,000 Londoners and use our planning powers to ensure new buildings are energy efficient and low emission. This is having a positive effect and we welcome the mayor's decision that from 1 January 2018 all newly registered taxis are...Read more...

Date: 09 October 2017

Source: https://www.theguardian.com/

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World.

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-tion of Polluted Lands and Polluted Waters etc.

# **NEWSBULLETIN COMMITTEE**

### **Executive Editor**

Dr. Pankaj Kumar Srivastava

pankajk@nbri.res.in

#### Compiled By

Dr. Virendra Kumar Jaiswal, Diwakar Saini, Ispreet Kaur

NBRI ENVIS Node: http://www.nbrienvis.nic.in

NBRI Website: http://www.nbri.res.in

ENVIS Cell: <a href="http://envis.nic.in">http://envis.nic.in</a> Ministry of Environment & Forests: <a href="http://envfor.nic.in">http://envfor.nic.in</a>