



News

Can forests save us from climate change?

If you think that sustainable forest management can be a major contributor to mitigating climate change, then you had better not hold your breath. At least not according to the findings in a recent study published in Nature by an international team of scientists led by Vrije University Amsterdam. The team included postdoc Sylvestre Njakou Djomo from the Department of Agroecology at Aarhus University in Denmark. The scientists found that the additional climate benefits through sustainable forest management will be modest and local rather than global. Even if Europe's forests are managed in such a way that their carbon sequestration is maximised it will not impact the climate significantly. Instead, it seems that the forests themselves will need to be adapted to climate change. We suggest that [Read more...](#)

Date: October 16, 2018**Source:** Science Daily**Moss rapidly detects, tracks air pollutants in real time**

Plants have evolved the ability to sense light, touch, gravity and chemicals in the air and soil, allowing them to adapt and survive in changing environments. Thus, plants have been used in studies to assess the long-term damage caused by accumulated air pollution worldwide. However, this type of study requires skilled personnel and expensive instrumentation. Xingcai Qin, Nongjian Tao and colleagues wanted to develop an easier way to use moss, a particularly good indicator of sulfur dioxide pollution, as a rapid, real-time sensor. The researchers gathered wild moss and exposed it to various concentrations of sulfur dioxide in a chamber. Using a highly sensitive, inexpensive webcam, the research team found that moss leaves exposed to sulfur dioxide slightly shrank or curled and changed color [Read more...](#)

Date: October 17, 2018**Source:** Science Daily**These Living Walls make it Easy to Get Your Greens In**

In the 1980s, French botanist Patrick Blanc modernized the concept of vertical gardens by creating vegetation systems affixed to walls. Since then, living walls have sprouted up in urban environments—particularly hotels and public spaces—bringing a burst of green to our concrete jungles. Increasingly, however, they are appearing in private homes—a bespoke addition that has many more benefits than just the aesthetic, as plants can also remove pollutants from the air and reduce stress levels. Though hundreds of plants and flowers can be used for living walls, factors such as climate, sun exposure, and client preference influence which ones landscape architects and designers choose for a given project. Each one allows homeowners to bring nature into their residences on their own term. [Read more...](#)

Date: October 22, 2018**Source:** Robbre Port**Availability of nitrogen to plants is declining as climate warms**

"Even if atmospheric carbon dioxide is stabilized at low enough levels to mitigate the most serious impacts of climate change, many terrestrial ecosystems will increasingly display signs of too little nitrogen as opposed to too much," said study co-author Andrew Elmore of the University of Maryland Center for Environmental Science. "Preventing these declines in nitrogen availability further emphasizes the need to reduce human-caused carbon dioxide emissions." Although the focus on nitrogen availability is often on developed, coastal regions, such as the Chesapeake Bay, that struggle with eutrophication -- runoff of nitrogen pollution from fertilized farms and lawns that feeds algae blooms and leads to the reduction in oxygen in the waters -- the story is very different on less developed land, such [Read more...](#)

Date: October 22, 2018**Source:** Science Daily**How plants and animals are teaching scientists to fight climate change**

The immensity of a program to reforest large swaths of the Amazon is hard to conceive — it aims to plant millions of trees over a remote area of Brazil roughly the size of Pennsylvania. If that wasn't a big enough challenge, there's also the threat seedlings face from dry spells, non-native plants and the voracious leaf-cutter ant. Enter a Brazilian industrial engineer and his partners, who think they have a solution. The team calls their invention Nucleario — a circular device that creates a safe oasis for a young tree, complete with mulchy ground cover, a water cistern to conserve rainfall and a wall to keep out invasive plants and creatures. The invention was recently awarded a \$100,000 prize in a worldwide design challenge, sponsored by the Biomimicry Institute, a Missoula, Montana..... [Read more...](#)

Date: October 28, 2018**Source:** NBC News

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