



## News

**These Plants Can Quickly Filter Toxins From Water**

Want cleaner drinking water, free of toxins and contaminants? Mother Nature's here to help. A number of studies have come out over the past year looking at the role different plants could play in remediation, i.e. the removal of dangerous substances. This green technology is known as phytoremediation, from the Greek "phyto" for plant, and "remedium" for restoring balance. Take, for example, moss. A non-vascular plant, mosses lack a root system, absorbing water and nutrients throughout their entire bodies. Researchers at the RIKEN Center for Sustainable Resource Science (CSRS) in Japan published a study last January showing that the moss *Funaria hygrometrica* can absorb an impressive amount of lead thanks to a special kind of acid contained in its cell walls. After 22 hours of exposure, the moss cells had absorbed up to 74 percent of their dry weight in lead. Some 85 percent of the accumulation happened within the cell walls, which absorbed lead even after being removed from the living plant.....[Read more...](#)

**Date:** September 04, 2018**Source:** Discover Magazine**How Plants Build The Perfect Ventilation System**

As the world heats up, plants face a dilemma—the same tiny holes they have to open to exchange gases also let out water. They can close the holes, called stomata, to stay hydrated in hotter, drier conditions but, in doing so, may miss out on critical carbon dioxide. Scientists wondered how this dilemma will play out as increasing portions of the world's plants experience consistently warmer, drier environments. To figure that out, they had to take a step back and better understand how plants regulate the number of holes—called stomata—each leaf develops. The answer not only suggests ways to engineer plants to withstand climate change, but also uncovers a previously unknown process by which plants fine-tune the amount of stomata they build. "It would be really nice to be able to better predict how vegetation, such as boreal forests, will react to global changes in climate," says lead author Anne Vatén, a postdoctoral scholar in the lab of Dominique Bergmann, a professor of biology at Stanford University. "Changes in stomatal development are a type of mechanism plants probably use to adapt .....[Read more...](#)

**Date:** September 09, 2018**Source:** futurity.org**Managing Delhi's toxic wastes to improve air quality**

Waste management and air pollution are becoming the leading concerns of public health in the national capital of Delhi. The toxic subsystem created by ill managed waste and its disposal adds to the worsening air quality of Delhi. In addition, a study by Ganga Ram Hospital has revealed that 50% of the population of Delhi is at risk of contracting lung cancer even if they do not smoke. Maybe it's time to ring the alarm bells. The Lancet Commission on pollution and health ranked India number one with 2.51 million deaths in 2015 due to pollution. Furthermore, the ambient air quality report of 2017 (Delhi), as released by the Central Pollution Control Board of India, shows that there were only 45 days with satisfactory air quality in Delhi through 2017. As of May 2018, there has only been one day with satisfactory air condition in the Delhi-NCR region. 'Satisfactory air days' as per the Air Quality Index legend is acceptable; yet people suffering from respiratory ailments have a tough time.....[Read more...](#)

**Date:** September 10, 2018**Source:** Observer Research Foundation**Purify the air in your house with these easy-to-grow indoor plants**

According to WHO, of the 20 most polluted cities in the world, 14 are in India and indoor pollution is as bad as outdoor pollution. Stagnant indoor environments allow pollutants to build up and stick around in greater amounts than we should be breathing in. Staying in places rife with air contaminants and lacking decent ventilation can cause what is known as "sick building syndrome" – that causes headaches, dizziness, nausea, and eye, ear, and nose irritation. Given that people spend a lot of their time indoors, air quality matters. Furnishings, upholstery, synthetic building materials, and cleaning products in homes and offices can give out a variety of toxic compounds – formaldehyde being one.....[Read more...](#)

**Date:** September 11, 2018**Source:** The Indian Express**Climbers, not potted plants, are the right choice for green walls in Delhi**

This monsoon, Delhi is at its verdant best. With the soot and dust washed off, leaves are finally flaunting their original shades. Even the naked patches of earth, turned sandy and gritty from the city's construction debris, have burst into untamed greenery. Somehow, many of the vertical gardens installed on concrete pillars supporting flyovers and elevated metro corridors in the past few months do not seem to share this happiness. Except for the ones flourishing in the VIP zones, thanks to the special .....[Read more...](#)

**Date:** September 10, 2018**Source:** Hindustan Times

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