



News

Climate Change Could Double Toxic Arsenic in Rice

Researchers specifically looked at rice because it grows in flooded paddies that help loosen the arsenic from the soil and make it especially sensitive to arsenic uptake. While many food crops today contain small amounts of arsenic, some growing regions are more susceptible than others. Future changes in soil due to higher temperatures combined with flooded conditions cause rice plants to take up arsenic at higher levels—and using irrigation water with naturally occurring high arsenic exacerbates the problem. While these factors won't affect all global commodities in the same way, they do extend to other flood-grown crops, like taro and lotus. "I just didn't expect the magnitude of impact on rice yield we observed," says Fendorf, who is also a senior fellow at the Stanford Woods [Read more...](#)

Date: November 01, 2019**Source:** Futurity**Community create 'blueprint' green wall to protect schoolchildren from pollution**

The wall of specially-chosen trees and plants now covers the playground at Hunters Bar Infant School, an achievement that has been three years in the making and a citywide effort. Rowan Hall, parent governor at the school started to look into air pollution levels at the school when a question about playground air quality was raised in a governors meeting in 2017. She said: "We realised that twice in two years we'd exceeded the UK limits for nitrogen dioxide so I went to the council and asked 'what can we do about this issue?'" They did some research into what other schools in the country were doing to tackle the problem and met with Sheffield University who said they would fund a research student to investigate the school's air quality for a joint project. Ms Hall said: "It's incredible to see [Read more...](#)

Date: November 04, 2019**Source:** The Star**Plants receive nitrogen boost in hotter climes**

Scientists in the US have shown that plant growth under extreme-warming conditions could be boosted thanks to more nitrogen in the soil. While plant growth is limited by the low level of nitrogen in the soil during modest warming conditions, the study shows that this is not the case in hotter temperatures due a surge of soil microbes that act to boost nitrogen supply. The researchers add, however, that this increase could be curtailed by the greater amount of carbon dioxide in the atmosphere. Previous studies have shown that elevated carbon dioxide can boost plant growth, whilst increased temperature may have the opposite effect. But few studies have looked at the combined effects of increased carbon dioxide and temperature. Current projections suggest that both atmospheric carbon-dioxide [Read more...](#)

Date: November 05, 2019**Source:** Physics World**Guest post: Will plants help make the planet wetter or drier in a changing climate?**

The two images below show the state of the second largest reservoir, Lake Oroville, in the world's eighth largest economy, California, a mere three years apart. (Use the slider to switch between 2011 and 2014.) The cause of the drastic reservoir depletion on the right was a devastating drought from 2011-15, which cost farmers \$2.7bn in 2015 alone. Droughts such as these punctuate California's history, but they are becoming more severe as the human impact on climate intensifies. Will such trends continue or are there other factors that may counteract the increasing drying of essential agricultural and economic areas? The challenge in answering this question is that the models we use to project our climate futures can suggest both wetter and drier conditions, depending on the season and region. [Read more...](#)

Date: November 05, 2019**Source:** Carbon Brief**How Plants Can Help You Tackle Air Pollution, Probably Better Than Tech**

With air pollution being one of the top health concerns today, it's time to take effective measures to fight the harmful effects of it. While air purifiers and pollution masks are an absolute must-have, getting your hands on a range of air purifying plants can also make a huge difference. Yes, you heard us. Air purifying plants like areca, spider, peace lily, sansevieria green, money plant and others work effectively in reducing harmful pollutants and toxins from the air to make it better for you to breathe. According to a study conducted by Ohio State University, plants and trees may be better and cheaper options than technology to mitigate air pollution. The study, published in the journal Environmental Science & Technology, found that adding plants and trees to the landscapes near factories and other [Read more...](#)

Date: November 10, 2019**Source:** Swirlster

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