



News

New framework will help decide which trees are best in the fight against air pollution

In a paper published in npj Climate and Atmospheric Science, air pollution experts from Surrey's Global Centre for Clean Air Research (GCARE) conducted a wide-ranging literature review of research on the effects of green infrastructure (trees and hedges) on air pollution. The review found that there is ample evidence of green infrastructure's ability to divert and dilute pollutant plumes or reduce outdoor concentrations of pollutants by direct capture, where some pollutants are deposited on plant surfaces. As part of their critical review, the authors identified a gap in information to help people -- including urban planners, landscape architects and garden designers -- make informed decisions on which species of vegetation to use and, crucially, what factors to consider when designing a green barrier. To address this knowledge gap, they identified 12 influential traits for 61 tree species that make them potentially effective barriers against pollution. Beneficial plant properties include small leaf size, high foliage density, long in-leaf periods (e.g. evergreen or semi-evergreen), and micro-characteristics such as leaf hairiness. Generally detrimental aspects of plants for air quality include wind pollination and biogenic volatile organic compound emissions. In the paper, the team emphasise that the effectiveness of a plant is determined by its environmental context -- whether, for example, it will be used in a deep (typical of a city commercial centre) or shallow (typical of a residential road) street canyon or in an open road environment. To help concerned citizens with complex decisions, such as which tree is best for a road outside a school in a medium-sized street canyon, the team from Surrey has also developed a plant selection framework. Professor Prashant Kumar, Founding Director of GCARE at the University of Surrey, said: "We are all waking up to the fact that air pollution and its impact on human health and the health of our planet is the defining issue of our time. Air pollution is responsible for one in every nine deaths each year and this could be intensified by projected population growth. "The use of green infrastructure as physical barriers between ourselves and pollutants originating from our roads is one

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These are strange times. But as the majority of the nation gets used to a new routine of remote working and social distancing, there has never been a more perfect time to create your own indoor jungle. A house full of plants doesn't only look good, it's also been proven to provide a host of psychological benefits: improved mood, reduced stress levels, greater productivity and longer attention span. So if you're struggling to concentrate in your new home office, start thinking green. One study even showed that recovering patients in rooms with plants had lower blood pressure and lower ratings of pain, anxiety and fatigue. Like we said: plants have never been more timely. For those of us who are locked up in our homes for the foreseeable future, don't think you're safe just yet: studies have shown that indoor pollution levels are often much higher than those outside. So if you start to develop a cough, it could just be dust particles, "volatile organic compounds" (nasty toxins emitted from your furniture, paint and washing detergents) or aerosol chemicals. Indeed, some four million people around the world die each year due to these harmful indoor pollutants. But that's enough scaremongering. There are plenty of species of houseplant that can suck up all these toxins for you, and pump out fresh oxygen to boot. Other plants can even help alleviate your allergies. Regardless of the size of your indoor space, picking the right plants can give you all of these benefits and more. Even better news: the more plants used, the bigger the benefit to air quality and overall wellbeing. Using these benefits as a ballpark, we have rounded up a selection of the best and easiest-to-care-for houseplants that can make your environment a little

.....[Read more...](#)**Date:** March 30, 2020**Source:** Independent**COVID-19: MoEF&CC extends validity of environmental clearances till June 30**

The validity of environmental clearances (EC) across the country were extended till June 30, 2020 by the Union Ministry of Environment, Forest and Climate Change (MoEF&CC), after the 21-day nationwide lockdown to control the spread of the novel coronavirus disease (COVID-19) came into effect. The projects are supposed to function under the terms and conditions, "notwithstanding any condition imposed in the respective Prior Environment Clearance", according to a memorandum issued by the ministry, dated March 25. The ministry had earlier issued a draft environment impact assessment (EIA) notification on March 12. The draft proposed to bring the projects that violated laws under regulations. Experts said the ministry should reconsider reissuing the draft notification after the lockdown is lifted. The EIA is a study conducted through which an EC is granted. All projects that fall under the purview of the Environment Protection Act, 1986, require an environmental clearance for running its operations. They are usually given before a project commences. The MoEF&CC, however, in recent years since 2017 has issued ex-post facto clearances to projects in violation of the law. "We are deeply concerned that this draft notification has been put out in the midst of a national health crisis. As you are aware, most of the country is under lockdown and there are severe restrictions on movement in public places," said a letter written to Environment Secretary CK Mishra, on March 25, according to media

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