

Genetically modified rice could help address China's smog problems

Chinese scientists have found a way to change the genetic make-up of a popular species of rice, a move they claim could ease the country's chronic smog problem by lowering the amount of fertilisers containing nitrogen that farmers use.

China suffers from more severe nitrogen pollution than any other country. Although it has just 7 per cent of the world's farm land, China consumes over one-third, or 35 per cent, of the world's nitrogen fertilisers. Such agricultural usage has led to massive pollution of the country's soil, water and air.

Chinese rice, especially the japonica subspecies grown in northern provinces like Heilongjiang, requires heavy use of fertilisers because of the poor rate at which it absorbs nitride from soil and water. Plants need nitride in order to grow healthily.

Now scientists claim to have unlocked the problem by cloning a gene called NRT1 from indica rice and inserting it into the japonica's genetic sequence. This boosts the rate at which the rice can absorb nitride by more than one-third.

The breakthrough, published in the latest issue of the journal *Nature Genetics*, was hailed as "a great discovery" by an anonymous peer reviewer. The transplantation of the nitric booster gene "had significantly improved grain yield and nitrogen use efficiency," they added.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: [Modified rice may help combat China's smog problem, Chinese scientists claim](#)