GMO rice dramatically reduces farm greenhouse gas emissions

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A slight change in a single gene of rice can avoid the same amount of greenhouse gas emissions each year as all the wind turbines in the world, the same as 15 nuclear power plants. Work led by Dr. Christer Jansson at the Department of Energy's Pacific Northwest National Laboratory found that transferring one gene from barley to rice lowered the methane (CH4 or natural gas) emissions from rice paddies to almost zero.

As the COP21 climate change talks get underway . . . in Paris, it's nice to see real progress on a critical front that doesn't get enough attention – food and climate.

Agriculture is a primary source of greenhouse gas emissions, especially as humans practice it nowadays, and emissions are on the rise. Over the last ten years, agriculture, forestry and other land uses have emitted over 10 billion tons of carbon dioxide-equivalent/year.

However, much of this CO2 equivalent is actually from methane, whether from the back-end of cows or from rice paddies. Methane is second only to CO2 as a greenhouse gas, being responsible for about 20% of the global warming effects since pre-industrial times.

Rice paddies are the largest anthropogenic methane source and produce over 10% of atmospheric methane. Their warm soggy and nutrient rich soil provides ideal conditions for methanogenesis.

Rice feeds half the world's population, and is slated to feed even more as the population grows. It is difficult to overstate the importance of this new rice in battling global poverty and global warming.

Jansson points out that, "As the climate warms, rice paddies will produce even more methane, making this technology even more significant."

Read full, original post: New Variety Of Rice Fights Global Warming And Global Hunger