

ENN Press Services
 Put your story in front of thousands of journalists, broadcasters and environmental professionals worldwide.



Genetically Engineered Pig or Cow for Dinner?

TOP STORIES WILDLIFE AGRICULTURE ECOSYSTEMS ENERGY BUSINESS CLIMATE POLLUTION GREEN BUILDING SCITECH LIFESTYLE HEALTH search

Where am I? > [Home](#) > [Top Stories](#) > [Scientists Breed Rice to Defy ...](#)

[Printer Friendly Version](#) [Email to a Friend](#) [ShareThis](#)

From: Dolly Aglay, Reuters
 Published April 12, 2006 12:00 AM

Scientists Breed Rice to Defy Climate Change

LOS BANOS, Philippines — Scientists are developing new flood and drought-prone rice varieties to combat the threat of global warming to Asia's food staple but more work is needed, the International Rice Research Institute (IRRI) said.

RELATED ARTICLES

- Scientists create flood-resistant rice
- Rice prices may calm but action still needed: expert
- Farmers face climate challenge in quest for more food
- Climate, Biofuel New Challenge to Poverty Alleviation

The institute needs \$25 million over the next 5 to 7 years to study the impact of rising temperatures, higher concentrations of greenhouse gases and greater extremes of droughts and floods on rice production, the IRRI director-general told Reuters on Tuesday.

"We have a wide range of research programmes that are addressing issues directly relating to [climate change](#) and rising temperatures," said Robert Zeigler at the IRRI headquarters in Los Banos, in the foothills of Mount Makiling near Manila.

"We have rice varieties that will be released in the near future that are more tolerant to flooding than currently available varieties," he said.

Zeigler also said the institute was developing rice lines that were tolerant of drought, and had just begun research on rice that could withstand high temperatures.

The institute, credited for helping the world feed itself by developing high-yielding rice during the so-called [Green Revolution](#) of the 1960s, is also helping with work on genetically modified Vitamin A enriched rice or "golden rice".

Golden rice was developed by European scientists by implanting two genes from a daffodil and one from a bacterium into japonica rice variety called T309. Samples of the grain were donated to the institute for research and breeding.

Three billion people, many of them in Asia, rely on rice to feed themselves and the IRRI is hoping a vitamin-enriched variety would improve nutritional standards.

Scientists at the IRRI are also up against rapid population growth in developing countries, which is compounding the problem of [global warming](#) on rice output.

For example, the population of the Philippines is growing at around 2 million a year and the country of nearly 90 million people is already one of Asia's biggest importers of rice.

LIKE GROWING OLD

The IRRI's study on climate change will look at how the rice plant reacts to rising concentrations of [carbon dioxide](#) and other greenhouse gases in the atmosphere and how production of the grain contributes to the emission of such gases, blamed for global warming.

The IRRI has committed \$2 million of its own funds for the research, and was seeking the rest from international agencies and foundations.

Three areas of about 20 hectares (50 acres) each in the Philippines, southern China and northern India will be used for the study.

Stay updated with the ENN RSS feed

MEMBERS

- » [Contributors](#)
- » [Press Affiliates](#)

PRODUCTS & SERVICES

- » [Submit a Press Release](#)
- » [Contribute to ENN](#)

ADVERTISE WITH ENN

- » [Advertising Rates](#)
- » [Contact ENN Sales Team](#)

ENN ARCHIVES

- » [News Archive](#)

ABOUT ENN

- » [About ENN](#)
- » [Contact ENN](#)
- » [Recommended Sites](#)

Oceana
 View all the featured contributing content by this source

PRESS ALERTS
 Get the latest releases from the world's leading environmental businesses and nonprofits

Sustainable & Smart

ecobuild fall

Conference: Dec. 8-11, 2008
 Exhibit: Dec. 10-11, 2008

WASHINGTON CONVENTION CENTER, WASHINGTON DC

"The effect of climate change is not going to be noted in one year to the next," Zeigler said.

"Maybe, it's gonna be like growing old. You never quite notice it one day to the next until you look at the mirror and you are bald and have grey hair," Zeigler said.

In a study released in 2004, the institute showed how rice yields declined 15 percent for every one degree Celsius increase in the mean daily temperature.

It attributed this to higher night-time temperatures associated with global warming.

Researchers speculate that increased temperature at night forces the plant to divert more energy to maintain metabolic functions instead of producing greater biomass and grain yield.

Temperatures are projected to rise globally by 1.5 to 4.5 degrees Celsius in the coming century, three to nine times more than in the past century, the institute said.

Source: Reuters

Contact Info:

Website :

[ShareThis](#)

Terms of Use | Privacy Policy
2007. Copyright Environmental News Network