

Non-patented, non-GMO herbicide resistant rice in development

A consortium of scientists led the Tamil Nadu Agricultural University (TNAU), Coimbatore has identified a novel mutant of rice which can withstand the use of a commonly used broad spectrum herbicide, Imazethapyr. Herbicides act by disrupting key enzymes and proteins involved in essential processes associated with growth and development of plants.

Imazethapyr is a popular herbicide but is not traditionally used on rice fields as it adversely affects the yield. Over years, many herbicide-tolerant crops, including those resistant to imazethapyr, have been developed but most of them are protected under patents.

The mutation identified by the group can be used without restriction in public funded rice breeding. Scientists used rice variety Nagina 22 in the study since it is already tolerant to heat and drought, and ideally suited for Indian conditions. In this variety, they identified a gene (HTM-N22) and the mutations within it which are responsible for development of tolerance to imazethapyr.

...

The researchers expect HTM-N22 to have an easy process of registration for widespread commercialization since the development of this mutant did not require genetic engineering of the rice crop.

The GLP aggregated and excerpted this article to reflect the diversity of news, opinion and analysis. Read full, original post: [Scientists find new way to make rice resistant to herbicides](#)