Chinese grown GM rice 'significantly reduces pesticide use', improves farmer health

Through the analysis of the data collected from the physical examination from farmers in China, a new study shows that GM rice significantly reduces pesticide use and adverse effects on farmers' neurological, hematological, and electrolyte system. Hence, the commercialization of GM rice is expected to improve the health of farmers in developing countries, where pesticide application is necessary to mitigate crop loss.

While GM rice has not yet been commercialized, a number of varieties have entered pre-production trials and some have received production biosafety certificates. The GM rice variety used in this study was Kefeng-8, which is one of the major GM rice varieties and has the potential to be commercialized in the future. The variety was developed by the Chinese Academy of Sciences and Fujian Academy of Agricultural Sciences, and has been in pre-production trials, which is the stage just prior to the issuance of a production biosafety certificate, since 2007.

This study shows that commercialization of GM rice may reduce pesticide use by more than 2/3. This equals a pesticide reduction of more than 196,000 tons in China annually.

It should be noted that 8% of rice farmers still suffer from acute pesticide-related poisoning. Thus, the estimated 16 million farmers who suffer acute poisoning illnesses each year can benefit from the use of GM technology and the consequent reduction in pesticide exposure.

Read full original article: Impact of insect-resistant GM rice on pesticide use and farmers' health in China