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## Rice Food Safety & Other Facts

Newsletter  
Nr. 14  
31<sup>th</sup> August 2009

### FOOD SAFETY

#### Rapid Alert System

- On 15<sup>th</sup> July a notification was sent on by Denmark concerning aflatoxins (B1 = 7; Tot. = 8.1 µg/kg - ppb) in basmati rice from India
- On 22<sup>nd</sup> July a notification was sent on by Sweden concerning aflatoxins (B1 = 4.1; Tot. = 4.5 µg/kg - ppb) in basmati rice from Pakistan
- Unauthorised genetically modified (Bt 63) rice noodles from Hong Kong rejected at Spanish border.

Source: [www.efsa.europa.eu](http://www.efsa.europa.eu)

EFSA has published a new opinion aimed at harmonising how data from field trials carried out for the **risk assessment of GM plants and derived food and feed** are produced and analysed. The objective of the document is to contribute to greater transparency in the risk assessment of GMOs and also to allow for a more rapid evaluation of applications. The opinion listed a set of recommendations covering elements such as the number of sites where experiments should be carried out, growing seasons and the geographical spread. The opinion, entitled "Statistical considerations for the safety evaluation of GMOs", is the product of over two years' work and capitalises on the experience of EFSA in the evaluation of GMO applications under EU regulations.

Source: [www.efsa.europa.eu](http://www.efsa.europa.eu)

### ORGANIC FOOD

An independent review commissioned by the **Food Standards Agency** (FSA) – UK shows that there are no important differences in the nutrition content, or any additional health benefits, of organic food when compared with conventionally produced food. The FSA is neither pro nor anti organic food and commissioned this research as part of its commitment to giving consumers accurate information about their food, based on the most up-to-date science.

Source: [www.food.gov.uk/news](http://www.food.gov.uk/news)

### GMO & BIOTECH

According to the International Rice Research Institute (IRRI), about 38% of the world area suffers from drought. One potential solution for better understanding the effects of drought on rice and breeding new varieties is through genetic modification. A new drought-screening facility and a protocol that mimics drought conditions in the rice ecosystem have been established at IRRI to support, enhance, and expand the scientists' work on developing a drought-tolerant crop. Unlike in the past, when **GM drought-tolerant crops** were mostly tested under artificial conditions using pots, the new facility allows scientists to better predict the crop's yield. Rice farmers, in fact, are often not interested in the significance of having a drought-tolerant crop per se, since they are more concerned about whether the crop will produce a good and sustainable yield. An improved crop could survive drought stress, yet not produce a harvestable yield. So, it is crucial for scientists to measure yield performance that would result from modifying a gene. Sometimes, the transgenic plant performs better than the wild-type counterpart in drought conditions, but may yield less in normal conditions. This is a crucial factor and the reason candidate genes tested at IRRI are designed to be activated by drought (making the expression of the drought tolerance gene inducible by drought) to avoid any yield penalty in normal conditions.

Source: *Rice Today*, vol. 8, n.3



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### SCIENCE & RESEARCH

By looking at what different types of rice have in common, a team of international scientists is unlocking **rice's genetic diversity** to help conserve it and find valuable rice genes to help improve rice production. Understanding its valuable genetic diversity and using it to breed new rice varieties will provide the foundation for improving rice production in the future and securing global food supplies. The research team scrutinized the genomes of twenty different types of genetically diverse rice used in international breeding. They were hunting for snippets of DNA, called single nucleotide polymorphisms or SNPs, that distinguish those rice. The collection of SNPs that was found is the most extensive in rice to date. If the rice types share a favorable trait, like drought tolerance, high yield, or even desirable cooking quality characteristics, they are likely to share similar SNPs contributing to that trait. Rice contains tens of thousands of genes, so finding a successful way to hunt through them all is a major breakthrough. IRRI maintains the International Rice Gene Bank containing over 109,000 types of rice, yet relatively few have been used in breeding programs. If breeders know more about the genetic makeup of rice, they can use it more effectively. This study represents a significant international collaboration attracting researchers from Asia, North America, and Europe who are interested in both basic and applied science from evolution, crop domestication, to practical breeding.

Source: <http://beta.irri.org/news>

### LAWS, STANDARDS & AGREEMENTS

**Commission Decision of 3 June 2009** (OJ L139/2009) establishing the expert group for technical advice on organic production. The group's task shall be to assist the Commission in: evaluating products, substances and techniques which can be used in organic production; improving existing rules and developing new production rules; bringing about an exchange of experience and good practices in the field of organic production.

Source: <http://eur-lex.europa.eu>

### OTHER NEWS

AGRA (Alliance for a Green Revolution in Africa) announced that it will embark on a joint initiative with the the Japan International Cooperation Agency (JICA) aimed at **doubling rice production in Africa by 2018**. Rice is quickly becoming a major staple food in Africa. According to AGRA, the demand for rice in sub-Saharan Africa is double the rate of population growth. Although rice production in the continent has increased significantly over the last five decades, much of the increase is based on expanding the area devoted to the crop and not from higher yields. Cooperation between AGRA and JICA is an important step toward significantly boosting rice production by Africa's smallholder farmers, which will reduce costly food imports and move the continent further toward food security.

Source: *Crop Biotech Update*

### EVENTS & MEETINGS

**6th International Rice Genetics Symposium**, 16-19 November 2009, Manila, Philippines. The Symposium comes at a key time for the international rice industry, which is under unprecedented pressure following record high prices and major production challenges. It provides an important forum for reviewing the latest advances in rice research, how recent breakthroughs could affect global food security, and in-depth discussion and exchange of information on classical genetics and genomics. More than 700 top international scientists and researchers from around the world are expected to attend.

Source: [www.ricegenetics.com](http://www.ricegenetics.com)