

# 'Human' milk from cows: China pushes GM food

BY GRACE NG  
CHINA CORRESPONDENT

**BEIJING:** China is creating a bumper crop of genetically modified (GM) produce to ensure food security and grab the global lead in the controversial but lucrative biotech sector.

The government even counts GM research as one of its technological achievements over the past five years, proudly displaying photos at an exhibition last month showing cows that had been genetically modified to produce milk similar to human milk.

Professor Li Ning, a lead scientist for this project to mass-produce "human" milk, told the China Daily that the cutting-edge technology would ensure that "healthy protein contained in human milk is affordable for ordinary consumers".

"In ancient China, only the emperor and the empress could drink human milk throughout their lives, which was believed to be the height of opulence," he said. "Why not make that kind of milk more available for ordinary people?"

This rationale – that planting more GM crops would ensure China's food security and provide cheaper produce to consumers at home and around the world – has also been used by Chinese officials to justify their support for this field.

In 2008, Premier Wen Jiabao said: "To solve the food problem, we have to rely on big science and technology measures, rely on biotechnology, rely on GM." The following year, China launched a US\$3.5 billion (S\$4.4 billion) R&D effort to grow GM crops.

"China has made the development of new GM organisms a national priority, investing more than 20 billion yuan (S\$3.8 billion) into this area – this is not commonly seen on a global basis," said Mr

Fang Lifeng, spokesman for the Greenpeace Food and Agriculture campaign, based in Beijing.

Bolstered by top-level support, China's Agriculture Ministry has already issued a slew of safety certificates to GM products, allowing them to be commercially produced on a large scale within two to three years.

Besides the "human milk"-bearing cows, the ministry has also issued bio-safety examination certificates to continue lab tests on new strains of wheat, soya beans, potatoes, cabbage and tobacco.

Even now, few consumers are familiar with genetically tweaked food products. In a survey last year by China Daily and Internet portal Sohu.com, more than 55 per cent of 1,000 respondents said they were ignorant when it comes to GM foods.

Such ignorance, combined with fear, has created much public confusion. At a forum on agri-biotechnology in central Wuhan city last October, some people in the audience reportedly asked whether eating GM rice would increase sperm count or cause hysteria.

There are also rumours that GM chicks, which are said to grow into adult hens within seven days, may speed up human hair growth.

But what Chinese consumers are most concerned about is the lack of labelling on GM products here.

Many products are sold without labels or with only fine print that is easily missed by consumers, despite rules set in 2001 that all GM products must be clearly labelled.

This issue has been highlighted widely by local media in recent months, sparking a public outcry.

It has forced officials to reveal early this month that China's first strain of GM



Transgenic cloned cows at Shaanxi's North-west Agriculture & Forestry University.

PHOTO: CHINA FOTO PRESS

## Some GM food projects

- Cows which produce milk with the properties of human milk. Unveiled last month, this dairy product may hit supermarket shelves in a few years if research to mass-produce it is successful.
- "Super-growth rabbits", which mature much more quickly than ordinary ones. They are meant to cater to the growing Chinese appetite for the delicacy.
- Since 2000, genetically modified papayas, soya bean oil, tomatoes and potatoes have been widely sold across the country. The GM produce is billed as more succulent and pest-resistant, or has brighter colours.
- The Chinese government is mulling whether to mass-produce and sell two rice varieties containing a protein that is toxic to insect pests, as well as disease-resistant corn.

corn has run into a policy deadlock and it may be years before it can be planted.

The government is also mulling new laws to tighten controls over GM food imports, exports, research and production, state news agency Xinhua reported.

This comes amid news that almost 70 per cent of consumers in five cities, including Beijing and Shanghai, oppose GM

rice, according to a survey by Tsinghua University and commissioned by the Greenpeace environment group.

"Another 56 per cent of respondents hope that the government will have an open consultation before allowing the large-scale plantation and sale of GM crops," said Greenpeace's Mr Fang.

✉ [graceng@sph.com.sg](mailto:graceng@sph.com.sg)