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Saving the BT Brinjal

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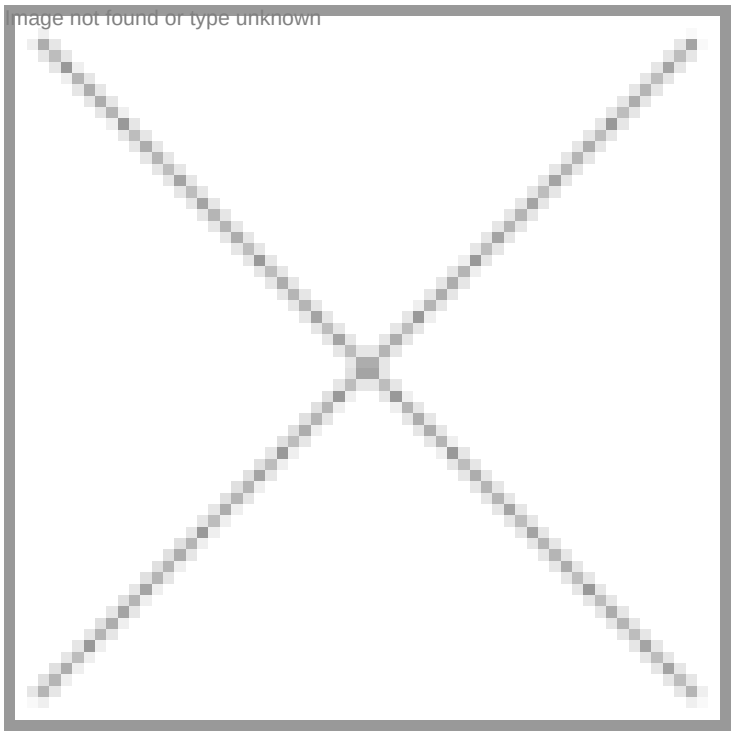

Saving the BT Brinjal

After six years of successful cultivation, the national debate on the desirability of using genetically modified (GM) cotton seeds has more or less been settled. India's farmers have voted overwhelmingly for Bt cotton varieties. Over 85 percent of the annual production of 3.1 million bales (of 170 kg each) comes from GM varieties. And India has become a net exporter of cotton within six years.

Cotton is India's first biotech crop and the nation is the on the verge of moving up the agricultural value chain by adaptingGM food crops. However, India's federal health minister, Dr Anbumani Ramadoss, who was till recently waging a relentless battle against tobacco use, has turned his attention to GM food crops. He has turned his attention to derail the ongoing regulatory process to approve India's first GM food crop, a Bt brinjal variety. The health minister, though not directly involved in the approval of biotech food product, has vowed to prevent its introduction in the country.

Why is this humble crop, Solanum melongena L, known as brinjal or baingan in India and eggplant/aubergine elsewhere important to the country's economy? This highly nutritious, low fat, egg shaped product is known as the "poor man's vegetable". India accounts for 26 percent of the global production eggplant, just behind China (30 percent).

Within the country, brinjal accounts for 8 percent of all vegetables and is grown in about 550,000 hectares by 1.4 million farmers. The brinjal economy is worth about $2 billion (Rs 9,600 crore) by conservative estimates. Area under cultivation has grown by 15 percent in the last 10 years but the production has barely increased by 9 percent. A major factor is the repeated attacks by the insect Leucinoda orbonalis or fruit and shoot borer (FSB) which increases the input costs and keeps the production down.

This was one of the main reasons why different scientific teams picked up brinjal as the candidate to use the GM technology, successfully done in the case of cotton, to minimize the use of unhealthy chemical pesticides. At least half-a-dozen publicly funded research teams are working on this and US seeds giant, Monsanto has helped its Indian partner Mahyco and other research teams with the technology to overcome the FSB in brinjal in recent years. A year ago, the regulator, GEAC, had approved limited field trials of Bt brinjal crop. A final decision on its commercial cultivation will be taken only after evaluating the experimental data.

It is too early for anyone to jump into the debate on the desirability of Bt brinjal. The biotech regulatory system has been revamped with experts inducted in large numbers to evaluate various GM crops. We must have the confidence in our scientific experts. We must also be aware of the practices in other countries. China has so far allowed three GM food crops—tomato, maize and green pepper. At least 15 other GM food crops have been approved for commercial cultivation in various other countries. India's vigilant public opinion and regulators are capable of safeguarding national health standards and the health minister and other opponents should await the reports of the experimental trials.

The Supreme Court of India is also hearing a public interest litigation (PIL) against GM products. The research andregulatory approval process in evaluating the suitability of important GM crops in the country should not come to a standstill due to preemptive controversies. A nation poised to become an economic superpower should not close its options on any product or technology prematurely and allow the experts to come to the right conclusion without extraneous pressures being applied by both supporters and opponents of each options.

Biotech has moved forward considerably in 2008 and hopefully 2009 too will be even a better year with the arrival of India's first GM food crop!

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