

## Bt Brinjal

If everything goes according to plan Indians will soon have to taste the first genetically modified (GM) food crop as the Maharashtra Hybrid Seed Company (Mahyco) is eagerly waiting the decision of the Genetic Engineering Approval Committee (GEAC) for environmental release of Bt Brinjal. Maybe, GEAC won't take much time to give clean chit to the first poisonous GM food. In fact GEAC is said to have already recommended Mahyco's Bt brinjal for commercial production. Behind Mahyco there is the all-powerful Monsanto—the global seed giant. This company has recently been fined 15,000 euros for falsely advertising about its seed killing herbicide—Roundup Ready.

Brinjal like potato, tomato, chilli, datura, tobacco and the deadly nightshade (belladonna) belongs to plant family called Solanaceae.

Solanaceae species are rich in complex chemicals called alkaloids and contain some of the most poisonous plants known to mankind. They produce alkaloids in their roots, leaves and flowers. These alkaloids can be hallucinogens, stimulants or outright toxic.

Farmers have been working for thousands of years to domesticate wild plants like those of the Solanaceae family, to make them safe for eating. Much of this exercise involved breeding out the toxins contained in the wild plants. Scientists too have used careful, selective breeding to “clean up” crop varieties which had good qualities but contained toxins. Now brinjal, a member of this family, has been genetically engineered (GE) to produce a toxin to protect itself against a particular pest. This seems to be a process working to reverse several thousand years of efforts to detoxify natural plants to make them fit for human consumption!

When genetically modified (GM) peas were being developed by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) in Australia to protect peas from the pest pea weevil, it was found that newly-formed proteins in the GM peas repeatedly caused immunity problems and lung inflammation when fed to mice. The experiments had to be abandoned. In another case, when mice were fed the genetically engineered Flavr Savr tomato, seven out of 40 experimental animals died within 14 days and the others suffered stomach lesions.

Genetic engineering in plants of the Solanaceae family could be dangerous since disturbing their genetic material through the process of inserting new gene constructs containing a battery of genes — including the toxin producing Bt gene — may trigger off metabolic processes that have been lying dormant.

There is no liability law in India. In the event of contamination of organic brinjal with Bt brinjal, what will be the process of recall? Who will be liable to the producers of organic brinjal? There are no provisions for monitoring the long-term impact of GE foods on the health of consumers. In case adverse health impacts are reported from eating Bt brinjal, who would be liable to pay compensation? How would the liability be fixed and what would be the quantum? In the absence of any kind of preparedness or safeguards, what would be the

liability of the government for approving such food crops? And in the event of damage caused by Bt brinjal, will Mahyco be put in the dock?

But the government in Delhi is more interested in promoting the interests of multinationals. These days the government is run by corporations and the so-called elected representatives are there to legalise what is illegal and against the interest of ordinary people.

Scientists who are on the pay role of multinationals are minimising the danger of Bt brinjal and it is really a tragedy that even left political parties are not taking the issue seriously. □□□