GMO eggplant may unlock Asian food revolution, cut pesticide use, farmer deaths

The humble aubergine – you might call it eggplant or brinjal – may be about to unlock a food revolution across Asia. It is a revolution that could dramatically raise yields of staple foods while cutting farmers' deaths from pesticide spraying. And it could be coming to a curry house near you.

Many Indian scientists believe their government is preparing to abandon a four-year moratorium on trials of a genetically modified form of one of south Asia's favourite vegetables, which could rapidly take over from non-GM varieties. Since science-friendly Narendra Modi swept to power in India's elections in May, the government's Genetic Engineering Approval Committee (GEAC) has been reactivated. If genetically modified aubergines get the green light, they would join a select number of modified plants, including papayas and squashes, that are grown primarily for human consumption. GM soya beans and maize are in the human food chain, but they are mainly grown for animals.

The modified aubergine in question is known as Bt brinjal, and contains a gene taken from a common soil bacterium, *Bacillus thuringiensis*. The gene produces a toxin that kills the vegetable's main pest, the larvae of the fruit and shoot borer moth, and was first promoted by seed giant Monsanto for <u>protecting</u> cotton against bollworm. The company agreed to donate the gene free for brinjal.

Bangladesh is leading the race to commercialise Bt brinjal. Next month, it will be planted in nationwide trials in fields, and sold in markets. Indian scientists hope to follow soon.

An attraction for farmers is that they are permitted to propagate Bt brinjal using their own seeds, which isn't the case with many modified crops (particularly Bt cotton), which are owned by biotech firms. "Bt brinjal has now become a powerful symbol of GM foods," says <u>C. Kameswara Rao</u>, a botanist at the Foundation for Biotechnology Awareness and Education in Bangalore. "If it gets the go-ahead, other GM crops can come through."

Next to leave the lab will be a <u>potato that is resistant to late blight</u>, a Bt chickpea, drought-tolerant sorghum and "golden rice", which is enriched to counter vitamin A deficiency.

Read full original article here: Modified aubergines could transform farming in India