Bangladesh joins the global GMO club, introduces Bt brinjal (eggplant)

Bangladesh became the 30th country to cultivate a genetically motivated crop with the introduction this week of Bt brinjal–eggplant modified to express *Bacillus thuringiensis*, a natural pesticide. As part of the initiatives, Bangladesh Agricultural Research Institute (BARI) distributed saplings of the new crop among 20 farmers in four regions.

With the introduction of Bt brinjal, farmers do not need to spray many pesticides because the plant produces a naturally occurring bacterium common in soils throughout the world and can infect and kill insects. This "microbial insecticide" is widely used in organic farming.

Farmers in Bangladesh have had to spray synthetic pesticides up to 80 times in a cropping season of brinjal, making the vegetable highly toxic. Unlike typical nerve-poison synthetic insecticides, Bt acts by producing proteins (delta-endotoxin, the "toxic crystal") that reacts with the cells of the gut lining of susceptible insects. These Bt proteins paralyze the digestive system, and the infected insect stops feeding within hours. Bt-affected insects generally die from starvation, which can take several days. It has no effect on humans and wildlife.

It took seven years to complete greenhouse trials and open-field trials of Bt Brinjal in various agroecological zones in the country. Bt gene insertion in brinjal makes it resistant to fruit and shoot borer (FSB) that causes 50 to 70 percent loss of brinjal yield.

Full original article: Cultivation of Bt Brinjal Begins