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Bt cotton now occupies 95% of produce in India

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During 2013-14, India cultivated a record 11.6 million hectares of Bt cotton planted by 7.7 million small farmers with an adoption rate of 95 percent, up from 11.0 million hectares in 2013. Notably, the increase from 50,000 hectares of Bt cotton in 2002 (when Bt cotton was first commercialized) to 11.6 million hectares in 2014, represents an unprecedented 230-fold increase in thirteen years.

Brookes and Barfoot's latest provisional estimate indicated that India had enhanced farm income from Bt cotton by $16.7 billion in the twelve year period from 2002-2013 and $2.1 billion in 2013 alone, similar to 2012. In 2014, India cultivated 11.6 million hectares of Bt cotton, planted in almost 95 percent of that area. More than 77 lakh farmers cultivate the GM crop, said the International Service for the Acquisition of Agro-biotech Applications (ISAAA) in a report released on January 30, 2015.

While regulatory authorities approved three hybrids in 2001, more than 700 types of Bt cotton seeds are now available in the Indian market. India has tripled its cotton production from 13 million bales to 40 million bales in the last 13 years, and is projected to overtake China to become to world's biggest cotton-producer in the near future. Currently, both produce 25 percent of the global market share.

As per Dr CD Mayee, president, Indian Society for Cotton Improvement, "India has to break the impasse in genetically modifed crops as this cannot go on for long. The sucess of Bt cotton must be an eye opener for those who oppose the cultivation of genetically modified and do rumour mongering."

"I am hopeful that government will take positive steps to bring back confidence of scientists", mentioned Dr Mayee who has also been the chairman of Agriculture Scientist Recruitment Board.

Positive news from Maharashtra

The Maharashtra government has given permission for field trials in some crops in genetically modified (GM) lines of rice, chickpeas, maize, brinjal and cotton. However, the decision to allow all the other field trials will be taken after closely monitoring and waiting for the results of these trials. The state joins Punjab, Delhi and Andhra Pradesh to approve open field trials in GM crops.

As per reports, the decision was based on the recommendations of a state-level committee, headed by Mr Anil Kakodkar, the former chairman of the Atomic Energy Commission.

Also, new Bt cotton hybrids have been approved in the state. When tested in the cotton belts of the Vidarbha and Marathwada regions, several next-generation Bt cotton hybrids, planted in high density in the fields, gave farmers 20 percent hike in their income. Mahyco and Ankur Seeds were involved in developing these hybrids, tested successfully on an experimental basis in Aurangabad, Jalna, Beed, Jalgaon, Dhule, Yavatmal, and Wardha.

As per Mr Bhagirath Choudhary, director (India), ISAAA, "Development and deployment of high-density planting to maximise yield potential, popularising the system, and mechanization of cotton picking and harvesting is the way forward for Bt cotton in India."

In the high-density planting system (HDPS), scientists intend to plant 1-2 lakh cotton plants in the same hectare of land. The spacing between two plants could be as low as 20 cm, instead of 90 cm-1 m for conventional cotton.