

BT COTTON – Monsanto must pay for crop failure

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Bt cotton is the first-ever genetically modified crop to be commercially grown in India. The harvests have come in and according to all indications; the crop has not performed well. The indifferent performance has been observed in several locations like Maharashtra, Gujarat, Karnataka and Andhra and has been reported at length in the media. The Bt crop in Maharashtra and Andhra Pradesh appears to have failed. The state government in Andhra has admitted, “Farmers have not experienced very positive and encouraging results”. Farmers, even those who have been enthusiastic supporters of GM crops, have expressed their disappointment with the crop. There are reports that the cotton quality is not very good and traders are not keen to buy Bt cotton. Farmers are bitter that the hype that was built up around Bt cotton was so great and the promises made so extravagant, that nothing had prepared them for this failure.

As this disappointing performance was unfolding across Indian fields, a scientific debate has been raging in various forums about a paper published in a well known science journal called ‘Science’. Two authors, Qaim and Zilberman have published a paper reporting that Bt cotton in India has shown a practical doubling (87% increase) in yield. This paper has been quoted extensively by several agencies as proof of the spectacular performance of GM crops.

What is really disturbing is that this paper extolling the outstanding performance of Bt cotton is based exclusively on data supplied by the company that owns the Bt cotton, Mahyco –Monsanto. Bt cotton, the first GM crop to be grown in India was given approval for commercial cultivation just last year in March, so this is the first harvest of the Bt crop. The data presented in this sensational paper are however not based on this harvest, as one would expect but on a few selected trial plots belonging to the company. No data from farmers’ fields or from the All India Coordinated Variety trials conducted by ICAR (Indian Council of Agricultural Research) have been included.

This amounts to manipulating data since trial plots are experimental fields with optimal conditions. The performance in real fields under normal cultivation conditions is very different. Nowhere near these kinds of results are seen anywhere else in the world where Bt cotton is being cultivated. In the US and China, 10 to 15 percent yield increase is recorded. These sensational data have led to a spate of media reports about the ‘superlative’ performance of Bt cotton both nationally and internationally. Such misleading reports can end up influencing policy makers in a direction that could ultimately be detrimental to farmers, and therefore must be publicly denounced.

There are other problems with this Bt cotton and a serious question mark on its suitability for Indian conditions. The cost of the seed at Rs. 1600/- a bag. As compared to around 400/- a bag for good cotton hybrids are a factor. Farmers had invested in this expensive seed expecting very high yield which has not happened. The requirement for refuge has not been followed for the most part as this season’s cultivation shows. Which means we should expect a rapid build up of resistance in the bollworm, leading to a failure of the pest management strategy sooner rather than later.

Who is going to pay for the failure of Bt cotton? Mahyco- Monsanto must be made to pay adequate compensation to those farmers who have recorded crop losses. This is now mandated in the Indian law. *The Protection of Plant Varieties and Farmers' Rights Act, 2001* provides for a liability clause, by which farmers are protected from being deceived by the producer or seller of the seed. The Act states that *other conditions being stable, if the seed sold to the farmer fails to realize its expected potential viz. in areas like yield, quality, pest resistance, etc; as had been disclosed by the breeder, the farmer will retain the right to claim compensation from the breeder of that variety.*

It is important to take action against Mahyco- Monsanto and ensure compensation is paid by them to farmers so that farmers, as so often in the past, are not made the guinea pigs of new, uncertain technologies and then left to fend for themselves when the product does not work. It is also very important for the Indian authorities to demonstrate that having put in place a new law to protect the farmers; they will not hesitate to invoke the law to procure the rights that are due to farmers, that they will not let big companies get off the hook.

And what has been the role of the GEAC in all of this? How did the GEAC approve the release of the Mahyco- Monsanto variety when its performance has been so obviously indifferent? What did the trial data say? Gene Campaign has demanded over and over again that the results of field trial data must be made available to the public; newspaper editorials have pointed this out and the GEAC has remained obdurate behind its wall of secrecy. If the GEAC had put the trial data out in the public domain, as it has to, by law, and the public had been involved in monitoring, as it is in other countries, it is highly likely that the poor performance of Bt cotton would have been detected before the variety was passed on to farmers. The GEAC should be charged with negligence and made to explain its conduct to Parliament.

Bt cotton is the very first GM crop to be grown in this country. It is therefore very important in this case to set the correct precedence and to send the right signals that the implementation of GM technology will not be done in a shoddy, careless manner and if the technology does not work, the farmer will not be allowed to suffer.