

Cons of GM Mustard

Why in news?

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Genetic Engineering Appraisal Committee (GEAC) recently cleared the proposal for genetically modified (GM) mustard.

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How effective was Bt Cotton?

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- Bt cotton promised of higher yield and lower pesticide usage in the 1990s. $\ensuremath{\sc vn}$
- Despite increased fertilisers and irrigation, the expectations of enhanced cotton yield have not been realised. \n
- Most of the countries that have higher cotton yields than India do not grow GM cotton.

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What are the shortcomings of GM Mustard?

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- Yield The yield claims on GM mustard are not very reliable. \slashn
- + U.S. and Canada uses GM mustard. $\space{\space{1.5}n}$
- But the highest yields in mustard are from the five countries which do not grow GM mustard U.K., France, Poland, Germany and Czech Republic. \n
- Evaluation The risks to health, environment and agriculture have not been evaluated.
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- Those inadequate tests which were conducted on Bt brinjal were also ignored, even though mustard is far more extensively grown and consumed

than brinjal.

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• HT (herbicide tolerant) GM crops have been condemned by a number of medical professionals.

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- Weed A herbicide-tolerant crop promotes constant exposure to a single herbicide which eventually results in weeds becoming resistant. \n
- Health A scientific report from Argentina found a fourfold increase in birth defects and a threefold increase in childhood cancers in HT soya areas. \n
- Studies have shown a strong correlation between growth of GM crops & herbicides used in U.S. and diseases such as acute kidney injury, diabetes, autism, Alzheimer's and cancers.
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- Seventeen of the 20 most developed countries including Japan, Russia, Israel and most of Europe refuse to grow GM crops. \n

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• The millions of poor women who depend on weeding to support their family will be displaced.

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- Indian will lose its seed diversity and the international competitive advantage of its non-GM mustard. \n

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What should be done?

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- If India wants to increase its mustard yield rapidly and safely, this can be done by adopting the practice of System of Mustard Intensification. \n
- Successful trials have been done in Bihar through a World Bank and results showed higher yields and better income. γn

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Source: The Hindu

