

Q. The approval of GM mustard in India is a watershed moment demonstrating country's confidence in using modern technology in agriculture. Discuss.

↳ Genetically modified crops.

GM crops are plants used in Agriculture, the DNA of which has been modified using genetic engineering techniques

↳ GM Mustard.

The approval of GM mustard in India is a watershed moment. It is the first GM food crop to be approved in India demonstrating country's confidence using Modern technology in Agriculture.

↳ India imports 60% of edible oil, there is Urgent need to increase yields of oilseed crops like Mustard.

↳ Mustard grown 75 lakh ha / year.

↳ Mustard are self-pollinated crop with difficult flower structure, and their production is difficult. So plant breeders creating a new hybrid.

↳ New hybrid.

Barbase (sterility)

Barstar (Restoring fertility)

Bar (Herbicide tolerance)

→ Pure parent line

→ Avoiding Contamination with other lines

This technology will now made available to plant breeders in public & private sectors lead to

Significant Improvement.

↳ Regulation

↳ Developed by DU scientist → Trials

↓
Report ← GEAC in 2015
in 2016
← GEAC recommended
US approval to ministers
in 2017.

↓
More trials, study
effect of honeybees → GEAC Approved
Commercial release of
this technology - 2022.

↳ Safety

↳ So far more than trillion meals with GM
foods are consumed in the world and no
adverse effect on health is reported.

↳ Indians have been consuming imported
GM oil for more than a decade and there has
not a single report of any health issue.

↳ Conclusion

we should welcome the introduction of
GM mustard, show confidence in adopting modern
technologies in agriculture.

This is for the benefit of our farmers
and consumers.