

WHY ENVIRONMENTAL RELEASE OF HERBICIDE TOLERANT GM MUSTARD IS AGAINST NATIONAL INTEREST

1. **GM mustard is low yielder.** After **GEAC has back tracked on increased yield claims** of GM mustard, there is no basis what so ever to go ahead with its approval (“... the yield comparison with national and local checks which has commercial use applications is beyond the mandate of the assessment” para 5.2 of final report of Sub-Committee of the GEAC dated 1-11-2016). **It will neither benefit farmer nor to the country because at least five high yielders are already being grown by the farmers. Claim about “saving on edible oil import” is also absolutely bogus.**
2. **Being HT crop, GM mustard is NOT safe to environment.** Through insertion of Bar gene in both the parents and double enhancer gene in male parent, **this GM mustard is designed as a herbicide tolerant crop.** Even though it has **not been tested for effects of herbicide usage on health and environment. In fact, regulators do know the possible hazard of spraying herbicide** and so ‘legal action’ against farmers on usage of herbicide is recommended. **‘Legal action’ on millions of small Indian farms is not feasible. HT crops have increased toxic residues in environment and created super-weeds in other countries.**
3. **Having no control over pollen flow, contamination is inevitable.** Distinction between **environmental and commercial release**, which is what regulators are now making, **is meaningless.** Once a living, self-reproducing organism leaves the controlled confines of laboratory and moves to the open environment, then it has life of its own and does not depend on official approvals. **Limited period or limited purpose release of living being into the open environment at significant scale is self-contradictory.**
4. **Health safety is NOT proven.** **Health impact related testing is done without spraying herbicide on crop.** From all indications, testing and evaluation that the GM Mustard has undergone does not inspire confidence in its desirability and safety (e.g., composition analysis was done at private unaccredited laboratory that too with problematic standardization). GM Mustard has undergone **less testing than even Bt Brinjal, which is still put under moratorium.** Many tests/ protocols and procedures suggested by Dr. P. M. Bhargava (Supreme Court nominee to GEAC) and Technical Expert Committee of Supreme Court have not been adopted. Ministry of Health has hardly been participating in the deliberations involving safety evaluation of GM Mustard and AYUSH Ministry has been excluded all together.
5. **Adequate, transparent and independent scrutiny is NOT done.** Not only that unlike Bt brinjal case **full dossier has not been placed on the website** of Government, even the 759 public comments officially acknowledged to have been received and reply to them has not been placed in public domain. Many of the testing protocols related to environmental impact and agronomic evaluation are prepared by developer itself; **and results were rigged.** Lead sectoral ICAR institution, DRMR, Bharatpur has admitted under RTI that it simply passed on results generated through trials conducted under protocol provided by developer itself. ICAR-AICRP protocols are ignored.
6. **States are objecting.** Agriculture is a state subject. No state Govt. has proactively sought GM mustard; rather **many state governments (including Rajasthan, which grows 46% of Indian mustard) have explicitly opposed it.** As per media reports and letters written to central Govt., all major mustard growing states are not in favour of releasing GM mustard/crops. If Union Govt. approves open environmental release, policy choices of state governments become meaningless as there is no credible system of monitoring across border mobility of seeds and they would have to bear the consequences of introduction of GM Mustard which is not of their making.

7. **Huge amount of objections from all quarters of Society.** More than 1 lakh people, 56 farm union leaders, more than 200 scientists and doctors, retired judges and bureaucrats, Supreme Court nominee to GEAC, several political parties, former union ministers, more than 150 civil society groups including consumer forums, beekeepers' association, organic farmers, Swadeshi Jagaran Manch have raised serious objections against GM mustard repeatedly. **Union Ministers concerned with women welfare and exports of organic produce have opined against GM mustard/crop.**
8. **Parliamentary Standing Committee and Technical Expert Committee of the Supreme Court have warned** against introduction of HT crops and for those crops where India is a Center of Origin/Diversity. Both of these criteria apply to this GM mustard.
9. **Farmers will be forced to buy GM seeds:** Given well known and officially admitted threat of contamination (with male sterility gene) of non-GM mustard crop. All mustard growers will have no choice than to buy GM seeds gradually.
10. **Organic Farming of Mustard will STOP.** GM crops are not permitted in Organic farming. This would be against the recent policy thrust of the Govt. as evident in declaring Sikkim an organic state and other similar steps to promote organic farming.
11. **Interest of beekeepers and honey quality will be sacrificed.** As mustard farming and beekeeping go hand in hand with two way beneficial relationship. **Herbicide spray will definitely make huge negative impact on honey bees.** Considering the threat, regulators recommended conditional release, which is unscientific approach.
12. **Consumers will have no choice than to consume GM oil.** As no effective labeling regime is feasible that can stop intermingling of GM produce with non-GM produce. This has serious implications as Glufosinate Ammonium (the weedicide against which this GM mustard is designed) is known to **cause negative neurological and teratogenic effects** on laboratory animals.
13. **No one owns post release responsibilities:** Agriculture ministry says "we shall promote GM mustard if approved by GEAC". GEAC washes its hands saying, "checking yield gain as well as post release remedial and accountability regime is not our mandate" and it recommends post-release monitoring measures like "Effect on Honey bees and honey", "Effect on Microbial diversity" etc. In fact **no department or agency of the government seems to be willing to take responsibility for consequences of releasing GM Mustard.**
14. **GM mustard will open the door for transgenic seed MNCs.** Inadequate testing/regulatory regime, secrecy, non-compliance with protocols, absence of liability and punitive regime, which are adopted for GM mustard **will set wrong precedent for regulation** of, at least, all food and herbicide tolerant crops, and there are many such food crops in the pipe line awaiting clearance and many of them developed by big foreign corporate giants. **We must NOT open Indian agriculture to these multinationals,** whose single motto is profit at any cost.
15. **Production of GM mustard has far greater negative consequences** than import of GM oil. Argument is made that we have been consuming imported GM canola (rapeseed) oil without any health consequences. Firstly, imported GM canola oil is no more than 1.2 % of our total edible oil import. Secondly, as it came without labeling, it is difficult to establish either that it is safe or unsafe; safety or otherwise of this oil import has to be studied by the regulator/official agencies which has not been done. Lastly, **import (and consumption) of gm produce has much narrow consequences, albeit serious, than cultivation of the same here** which has much broader range of consequences.
16. **Release of GM HT mustard will be against the Election Manifesto** of the present government which promised that "Genetically Modified (GM) foods will not be allowed without full scientific evaluation on its long-term effects on soil, production and biological impact on consumers". That such a full scientific evaluation has taken place is not in the public domain.
17. **Objections are scientifically valid and evidences have been provided.** All of the above points are well documented and in almost all cases documentary evidences have been provided to regulators and are available at <http://indiagminfo.org>. Promoters of sustainable farming are **ready for open public debate** on all these points.