

Brief record of the 30th meeting of the Genetic Engineering Approval Committee held on 31.10.2001.

The 30th meeting of the Genetic Engineering Approval Committee (GEAC) was held on 31.10.2001 at 11.00 a.m. in the Ministry of Environment & Forests under the chairmanship of Shri A.M. Gokhale, Additional Secretary to further discuss the matter relating to marketing of transgenic Bt cotton 'Navbharat 151' by M/s Navbharat Seeds Pvt. Ltd., Ahmedabad.

2. The list of participants is annexed.

3. The Chairman recalled the discussions on the matter in the 29th meeting of GEAC held on 18.10.2001 and informed the Committee of the following developments on the matter since then.

- Dr. D.B. Desai, Managing Director, Navbharat Seeds Pvt. Ltd., in his response dated 21.10.2001 denied that Navbharat 151 has been developed through genetic Engineering and appear before the GEAC on 31.10.2001.
- Dr. C.D. Mayee, Director, Central Institute for Cotton Research (CICR), Nagpur, who was a member of the inspection team authorized by the MoEF for conducting on the site inspection on 8.10.2001, sent his report of the tests conducted in CICR on the samples collected during the inspection. Based on this, he has concluded that Cry 1 Ac gene has been meticulously incorporated into the variety.
- The Ministry received a communication from Managing Director, MAHYCO informing about the seed production by M/s Navbharat Company on an area of 480 acres in Kurnool district in Andhra Pradesh, in the name of Jay, Vijay and Digvijay. In order to confirm these reports, Dr. E.A. Siddiq, Chairman, Monitoring and Evaluation, was requested to visit some farmer's fields in Kurnool district in Andhra Pradesh and report back before the GEAC meeting on 31.10.2001. Dr. Siddiq in his report has confirmed that Jay, Vijay and Digvijay are genetically engineered.
- The Principal Secretary, Forests & Environment, Government of Gujarat and member Secretary, Gujarat Biotechnology Coordination Committee informed about the practical difficulties in implementing the GEAC's order dated 18.10.2001.
- The Navbharat Seeds Pvt. Ltd. filed a civil writ petition in Delhi High Court against MoEF, GEAC, Gujarat State Biotechnology Coordination Committee and the District Level Committees, requesting for quashing the ex-parte order dated 18.10.2001 of destruction of cotton crops, and striking down the Rule 15(2) of the 1989 Rules which contemplates penal action without prior order/notice to the

affected party as illegal, unjust and ultra-virus the Constitution of India. The matter was coming up for hearing on 31.10.2001.

4. In this background, the Chairman first invited Shri P.K. Ghosh, Principal Secretary, Forests & Environment, Government of Gujarat to explain their position. Shri Ghosh informed that the Government of Gujarat upon receiving GEAC'S order dated 18.10.2001 set into motion the process of gathering information about the cultivation of Navbharat 151 in Gujarat through the district level machinery. They now have these details taluka and farmer wise. The total area under cultivation of Navbharat 151 was about 11, 820 acres. Further, two pickings of cotton bolls amounting to approx. 65-70% of the total yield had already reached the market. They also filed a caveat in the High Court of Gujarat as directed by GEAC for preventing ex-parte stay of the order. In addition, the Agriculture Department has issued a show-cause notice to the company. He further informed that a meeting of the State Biotechnology Coordination Committee was held on 29th October, wherein it was decided that destruction of the standing crop may lead to serious law and order situation. They therefore requested the Committee to review and consider its order regarding destruction of the standing crop.

5. The Committee deliberated at length the various nuances of the matter vis-à-vis the Gujarat Government's request.

6. Thereafter, Dr. D.B. Desai, Managing Director, Navbharat Seeds Pvt. Ltd. was requested to depose before the Committee. The full text of the dialogue with Dr. Desai is at Annexure I. In brief, Dr. Desai informed that the germplasm for developing Navbahart 151 was obtained from farmers fields in Maharashtra in 1997-98, and the Navbharat 151 hybrid was developed by using conventional plant breeding method. The members however did not find his explanations scientifically satisfactory, and were not convinced that a pure, non-segregating, genetically fixed, inbred line could be developed in such a short period. Moreover, in nature, no cotton germplasm possesses bollworm resistance/tolerance. Being a qualified plant breeder himself, and also being aware about the Bt gene, his expressing ignorance about the presence of Bt gene in Navbharat 151, which he claims to be bollworm tolerant, is not convincing. Dr. Desai admitted that they are organizing seed production through contractors for Navbharat 151 in Andhra Pradesh. Dr. Desai was requested to furnish within seven days starting from 31.10.2001, the following information without fail:

- list of contractors, dealers, farmers who have been supplied germplasm / planting material / seeds of Navbharat 151, or by whatever name it is called and other relevant information including the quantity provided.
- details of seeds sold in the market in Gujarat and outside Gujarat.

7. Dr. Desai was also directed to supply to the GEAC seeds of parental lines of Navbharat 151; or by whatever name it is called for establishing identity of the hybrid.

8. Based on the various scientific test reports including Gene check and ELISA, conducted by the Centre for Genetic Manipulation of Crop Plants, University of Delhi and the Central Institute for Cotton Research, Nagpur, and the test reports of Dr. Siddiq, the GEAC concluded that the Navbharat 151 hybrid cotton variety is genetically engineered. As the Navbharat Seeds Pvt. Ltd. have developed and marketed these seeds without the approval of GEAC, the company has violated Rules 7,8,9,10 of the Rules for Manufacture, Use, Import, Export and storage of hazardous microorganisms/Genetically Engineered Organisms or Cells 1989 notified under Environment (Protection) Act, 1986.

9. In the light of the information provided by the Principal Secretary, Forest & Environment, Government of Gujarat, that nearly 11,000 acres of area in Gujarat is under cultivation of cotton plants of Navbharat 151 and that two pluckings of cotton bolls have already been made by the farmers, and the practical difficulties in the implementations of GEAC's order of 18.10.01. and in the background of the deposition made by Dr. D.B. Desai, Managing Director, Navbharat Seeds Pvt. Ltd., who appeared before the Committee, the GEAC decided as follows:

- (a) As regards the cotton which may have already reached the market, the Government of Gujarat would try to retrieve the same to the extent possible, destroy the seeds and store away the lint.
- (b) As far as the lint that has already reached the market, the GEAC notes that this material was not tested for safety and therefore, this may be brought to the notice of the public by the Gujarat Government.
- (c) The Gujarat Government would procure at the appropriate support price, the cotton bolls from the remaining standing crop of Navbharat 151 in the farmers fields on maturity and also from the farmers storage places to the extent possible.
- (d) The cotton procured by the State Government will be ginned for separation of lint and seed, the seeds will be destroyed and the lint and that which gets retrieved under (a) above will be kept under safe custody till further orders from the GEAC on the matter on the basis of the report of the testing of lint by the State Government through the Central Institute for Cotton Research, Nagpur.
- (e) The State Government should also take necessary steps to prevent the use of Navbharat 151 seeds by the farmers either in the F-1 or F-2 generations.
- (f) Upon completion of pluckings, the State Government will ensure uprooting and complete destruction of the crop residue by uprooting of burning and sanitation of the fields.

- (g) The Government of Andhra Pradesh will be directed to take necessary action for stopping immediately the seed production and multiplication programme of the so called Navbharat 151 or by whatever name it is called, in the Kurnool and Mehaboob Nagar districts of Andhra Pradesh as has been confirmed by the reports and other districts if any.
- (h) The Managing Director, Navbharat Seeds Pvt. Ltd was directed to supply information to GEAC within seven days on:
- list of contractors, dealers, farmers who have been supplied germplasm / planting material / seeds of Navbharat 151, or by whatever name it is called and other relevant information including the quantity provided.
 - details of seeds sold in the market in Gujarat and outside Gujarat.
- (i) The Managing Director Navbharat Seeds Pvt. Ltd. was also directed to supply to the GEAC seeds of parental lines of Navbharat 151, or by whatever name it is called, for establishing identity of the hybrid.
- (j) As regards reported cultivation of Bt cotton in other States, the GEAC will gather information through the respective State Governments and the Chairman will take necessary decisions on the same.
- (k) The issue of liability of Navbharat Seeds Pvt. Ltd. will be settled by the Court of Law.
- (l) The Ministry of Environment & Forests will set into motion the due process of law.

10. The meeting ended with a vote of thanks from the Chair.

List of participants for 30th meeting of GEAC held on 31.10.2001.

1. Shri A.M. Gokhale Chairman
Additional Secretary
Ministry of Environment & Forests
New Delhi
2. Shri Sushil Kumar Co-Chairman
4/11, Sarvapriya Vihar
New Delhi-110016
3. Shri P.K. Ghosh
Principal Secretary (Environment & Forests)
Government of Gujarat
Gandhinagar
4. Shri Arvind Agarwal
Commissioner of Agriculture
Government of Gujarat
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5. Dr.P.K. Ghosh
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6. Shri D.D. Verma
Joint Secretary
Ministry of Environment & Forests
New Delhi
7. Dr. B. Balakrishnan
Joint Secretary (ITP)
Investment & Technology Promotion (ITP) Division
Ministry of External Affairs
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8. Shri A.K. Thakur
Joint Secretary
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Udyog Bhawan, New Delhi
9. Dr. O.P. Agarwal
Joint Adviser, RPBD
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10. Shri K.C. Jain
Assistant Director General
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11. Dr. Vasantha Muthuswamy
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12. Ms. Dolly Chakraparty
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Krishi Bhawan
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13. Dr. A.D. Pawar
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14. Dr. C.D. Mayee
Director
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15. Shri R.P. Sharma
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16. Dr. A.K. Bhatnagar
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17. Prof. Subhash Chand
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I.I.T., New Delhi-110016
18. Shri J.S. Choudhary
Deputy Secretary
Ministry of Health
Nirman Bhawan, New Delhi
19. Ms. Sripriya Ranganathan
Under Secretary
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Udyog Bhawan, New Delhi
20. Dr. D.B. Desai
Managing Director
M/s Navbharat Seeds Pvt. Ltd.
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21. Dr. G.V. Sarat Babu
Additional Director
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New Delhi
22. Dr. Sujata Arora
Joint Director
Ministry of Environment & Forests
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23. Ms. Madhu Gupta
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