

F. No. 13/39/2007-CS-II
Government of India
Ministry of Environment, Forest & Climate Change
CS.III (Biosafety) Division

Indira Paryavaran Bhawan,
Jor Bagh, Aliganj
New Delhi-110003

April 24, 2017

OFFICE MEMORANDUM

Subject: Authorizing Indian Council of Agricultural Research (ICAR) for approval of *Bt* Cotton Hybrids

In supersession of earlier OM. No. 13/39/2007-CS-II dated 17.04.2009 and in pursuance of decisions taken in the 132nd meeting of Genetic Engineering Appraisal Committee (GEAC) held on 12.04.2017 Ministry of Environment, Forest & Climate Change (MoEF&CC) hereby authorizes Indian Council of Agricultural Research (ICAR) to take the entire responsibility of evaluation, approval, management and monitoring of *Bt* Cotton Hybrids in place of current existing Event Based Approval Mechanism (EBAM) serviced through a Standing Committee in Department of Biotechnology (DBT).

2. Hence forth, ICAR shall be responsible for confirmation of the presence or absence of the approved gene / event, level of protein expression etc. in *Bt* Cotton Hybrids.

3. ICAR shall ensure the following conditions/ information before granting permission for *Bt* Cotton Hybrids.

- i. Confirmation of gene/ events through molecular characterization by the licensor stating that the gene/s being used is one of the approved events through any of the Notified Referral Laboratories under Sub-section 1 of Section 4 of Seeds Act, 1966.
- ii. Confirmation of level of protein expression in green house and field trials from any of the Notified Referral Laboratories under Sub-section 1 of Section 4 of Seeds Act, 1966.
- iii. Morphological characters using DUS descriptors as per PPVFRA guidelines for the hybrids as well as parental lines
- iv. Bio-efficacy data generated in laboratory conditions
- v. Boll damage measured by ETL at 10%
- vi. Affidavit of ownership of *Bt* Cotton Hybrid/ variety
- vii. Each application shall contain data pertaining to single hybrid only; Individual application should be submitted for each State/Zone
- viii. Performance trial report including agronomic parameters, yield with CD & CV, pest & disease reaction for the proposed *Bt* cotton hybrid, fibre quality attributes, spinning potential [supported by CIRCOT (ICAR) data] etc. of at least past two years, for both rainfed and irrigated situations as evidenced by at least one SAU/ICAR-


AICCIP trial from respective SAU centre from each State. Seed cotton yield should be statistically significant over best performing Bt check in respective state. The SAU/ICAR report should be certified/ signed by the competent authority, page-wise with seal and date.

- ix. Number and names of hybrids approved under EBAM so far for each State, names of hybrids available in the market, and how the proposed hybrids are better than the approved hybrids
- x. Data on tolerance of *Bt* cotton hybrids to CLCuV (only for hybrids to be released in North Zone) as evaluated by SAU Centre in North Zone/CICR, Sirsa
- xi. Proposed strategy of refugia (including name of hybrid, proof of its performance etc.) and undertaking on amount to be spent (Rs. In lakhs) or percent of sales that will be spent on examination / education to farmers on the use of refugia, and benefits

4. ICAR may prescribe any other additional tests or data requirements or conditions as felt appropriate, prior to approval of *Bt* Cotton Hybrids.

5. In case ICAR constitutes a committee for approval of *Bt* Cotton Hybrids, it shall have a representative from MoEF&CC and DBT.

This issues with the approval of the Competent Authority.


(Madhumita Biswas)

Director & Member Secretary GEAC

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To:

Director General- Indian Council of Agricultural Research (DG-ICAR), Krishi Bhawan, New Delhi-110001

Copy to:

- 1. Shri. Rajesh Kumar Singh, Joint Secretary (Seeds), Ministry of Agriculture, New Delhi-110001
- 2. Dr. J.S. Sandhu, DDG (Crop Science), ICAR, Krishi Bhawan, New Delhi-110001
- 3. Dr. S.R. Rao, Adviser, Department of Biotechnology, New Delhi-110003