## **RK** Trivedi

**Executive Director** 



Date: 21.04.2022

NSAI/2022/0015

To Sh. Dilraj Singh Secretary Agriculture, Punjab Mini Sectt. 2th Floor R. No. 226, Chandigarh

Sh. Gurvinder Singh,
Director of Agriculture,
Department of Agriculture,
Punjab Kheti Bhawan,
Institutional Site No.204 Phase 6, Mohali, Punjab

Dr Paramjit Singh,

Director cum Principal Cotton Breeder, PAU Regional Research Station, Bathinda -151001

Dear Sirs.

Sub: CLCuV disease screening trials of GEAC recommended Bt cotton hybrids by PAU Ludhiana

The National Seed Association of India (NSAI) is an apex body of seed companies and allied sector with around 500 members. Being the apex body representing the seed industry, NSAI engages partners and assists various governmental, regulatory and scientific entities in enabling a favourable policy and creating conducive environment for the growth of the seed industry in India. The members of NSAI develop highly potential hybrids/varieties of various crops including cotton suiting to the requirements of farmers across the country including Punjab State.

To ensure timely supply of quality seeds, the Central Government has put in place central statutes like, the Seeds Act, 1966 to regulate the quality of seeds put in the market, the Seeds (Control) Order, 1983, issued under section 3 of the Essential Commodities Act, 1955, to regulate both seed quality and trading activity. Apart from the above two statutes, the Bt cotton hybrids are governed by the Environment (Protection) Act, 1986 (EP Act) and Rules for the Manufacture, Use/Import/Export and Storage of hazardous microorganisms/Genetically engineered organisms or cells, 1989 (1989 Rules), issued under the EP Act.

As you may be well aware, since the first commercialization of Bt-1 cotton hybrids in 2002, the Genetic Engineering Appraisal Committee (GEAC), a Competent Authority constituted under 1989 Rules, had been according approval for commercial release of Bt-1 cotton hybrids and subsequently Bt-2 cotton hybrids also. It is pertinent to further submit that the GEAC, as per the decision taken at Agenda No. 7.2 of its 132<sup>nd</sup> meeting, held on 11-08-2016, has transferred the matter of Bt cotton hybrids approval from the Standing Committee to Ministry of Agriculture/ICAR, which are the right authorities under the Seeds Act, 1966. (Copy of Decisions of GEAC taken in its 132<sup>nd</sup> meeting is enclosed). The Department of



Agriculture of all the cotton growing states has adopted the mechanism of conducting trials of Bt cotton hybrids in the respective States and granting commercial approval by ICAR, which was put in place by the Central Government as per GEAC's decision in its 132<sup>nd</sup> meeting.

It is pertinent to mention that, as per the above mechanism, trials have conducted on tolerance of Bt cotton hybrids to CLCuV and other agronomic parameters, yield etc. at six locations in North India namely, Bathinda, Faridkot, Abohar, Hisar, Sirsa (CICR) and Sriganganager earlier under the aegis of GEAC/Standing Committee and now under the aegis of ICAR before according approval for commercial release of the said Bt cotton hybrids.

Notwithstanding such robust mechanism in place, the Department of Agriculture in Punjab is again subjecting the ICAR approved Bt cotton hybrids to retesting by PAU, Ludhiana, under the supervision of Director cum Principal Cotton Breeder, PAU Regional Research Station, Bathinda. This repetitive testing by PAU for the Bt cotton hybrids, already tested and approved by ICAR as per the Central Government decision, is causing huge cost and delay in the commercial release of the said Bt cotton hybrids.

In this connection, we request to kindly consider the following submissions:

- Presently, CLCuV and whitefly are not anymore a problem and, over and above, the ICAR's trials of Bt cotton hybrids, conducted in Punjab, cover CLCuV and whitefly aspect also, In the light of this, laying down the requirement of testing the ICAR approved Bt cotton hybrids again in Punjab by PAU, Ludhiana, is unnecessary and carries no meaning nor any logic.
- 2. Further, for obtaining permission from the Department of Agriculture, Punjab for sale of Bt Cotton hybrid seeds, which had already been approved by ICAR under EBAM, seed companies are required to pay once again huge fees for trials for CLCuV tolerance in Punjab in different locations. We state that it would add huge financial burden on the seed companies for subjecting the approved Bt cotton hybrids to evaluation trials once again.

The Punjab Agricultural University, Ludhiana, (which is acting as Nodal Agency for Bt cotton hybrids trials in North Zone) is conducting CLCuV screening trials for all the GEAC/ICAR approved Bt cotton hybrids every year for inclusion in the State Seed Licence. The testing fee is Rs.2,47,800/- per hybrid for six locations in North. All seed companies put together are paying crores of rupees towards these trials. Based on the trials and based on average performance of two years trials, commercial approvals are given for one/two/three years. Even for the hybrids, having commercial approval for three years, PAU is insisting for trials every year. It is to be considered that the hybrids, having commercial approvals for three year, the period is extended to five years and trial is conducted for one year thereafter.

In this connection, it is also to be considered that the Maximum Sale Price (MSP) for Bt cotton hybrid seeds is fixed by the Central Government under the provisions of the Cotton Seed Price (Control) Order, 1983 and the same is applicable across the country. Therefore,



there is absolutely no possibility to meet the huge expenses by seed companies towards fee for conducting additional trials of the Bt cotton hybrids, which have been already tested and approved for North Zone by GEAC/Standing Committee/ICAR.

We therefore request you that considering the additional and unnecessary financial burden on the seed industry and application of uniform MSP, fixed by Central Government for all the States, please support the seed industry, which is passing through critical situation due to Covid-19 pandemic situation and consequent economic slowdown, and kindly allow the sale of Bt cotton hybrid seeds, which have been approved by GEAC and tested in ICAR AICRIP trials, without any further additional testing every year for CLcuV in state trials. If any CLcuV trial is required to be done, it should be done at least after a gap of minimum of 5 years of the first approval instead of every year.

We earnestly request for an early favourable decision in the matter in the interest of Indian seed industry and the farmers.

With best regards,

Yours sincerely,

R K Trivedi

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

Indira ParyavaranBhawan, 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 132<sup>nd</sup> 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).

- 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.
    - 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.
    - 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.
    - 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
- 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.
- 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 E-mail Id: geac.secretariat@gov.in

Telefax: 91-11-.24695363

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