

OFFICE MEMORANDUM

Subject: Recommendation of the Standing Committee for Bt cotton hybrids expressing four approved events namely Event MON 531 (*cryIAc*); Event MON 15985 (*cryIAc* + *cry2Ab*), GFM Cry1A (*cryIAb* & *cryIAc* gene) and JK Event 1 (*cryIAc*) eligible for commercial release by the State Agriculture Departments in **South zone**.

The Genetic Engineering Approval Committee (GEAC) established under Rule-4 of the Rule-1989 has adopted Event based approval mechanism (EBAM) in respect of Bt cotton hybrids expressing approved events in its meeting held on 02.04.2008 and subsequently a new procedure under the EBAM was adopted by the GEAC in its 91st meeting held on 14.01.2009. Details of the new procedure adopted under the EBAM is available at GEAC website i.e. http://www.envfor.nic.in/divisions/csurv/geac/geac_home.html. In accordance with the decision taken by GEAC in its meeting held on 14.01.2009, the Ministry of Environment & Forests (MoE&F) had constituted a 'Standing Committee' to review the applications for commercial release of Bt cotton hybrids expressing approved events vide O.M. No. 13/39/2007-CS-II dated 17.04.2009. The Standing Committee in its **5th meeting held on 29.06.2010** considered applications received from various seed companies for their eligibility for commercialization of Bt cotton hybrids expressing 4 approved events as subjected above.

2. The applications were scrutinized by the Standing Committee as per procedure for commercial release of Bt cotton hybrids vide Revised O.M. No. 13/39/2007-CS-II dated 17.04.2009 issued by MoE&F for the following:

- a) Confirmation of gene/ event through molecular characterization by the licensor that the gene/s which is being used is one of the approved events;
- b) Level of protein expression in green house and field trials;
- c) Morphological characters using DUS descriptors;
- d) Bio-efficacy data generated in laboratory conditions;
- e) Authorization certificate/ No Objection Certificate (NOC) from technology provider in case of sub-licensee.

3. Based on the above procedure, the Standing Committee has recommended the following Bt cotton hybrids for commercial release in the **South zone (Andhra Pradesh, Karnataka and Tamil Nadu)** by the State Agriculture Departments subject to terms & conditions laid down by the respective State Department of Agriculture as adopted for conventional (non-Bt) cotton seeds/hybrids or truthfully labeled seeds as per the State Government's procedures.

S.No	Name of the Company	Name of the Hybrid	Zone
1	Pravardhan Seeds Pvt. Ltd.	PRCH-31 Bt <i>cry1Ac</i> gene (Event MON 531)	South Zone
2	Super Seeds Pvt. Ltd.	Super -721BGII, Super -931BGII, Super -965BGII, Super -971BGII, (Cry1Ac & Cry2Ab-MON 15985)	South Zone
3	Global Transgene Ltd. *	NCEH-14, NCEH-29 (event GFM Cry 1A)	South Zone
4	Mahyco	MRC-7361 BGII, MRC-7375 BGII, MRC-7377 BGII, MRC-7385BGII, MRC-7387 BGII (Cry1 Ac & Cry2Ab-MON 15985)	South Zone
5	Ankur Seeds Pvt Ltd	ANKUR 3224 BGII, ANKUR 3244 BGII, ANKUR 3228 BGII (Cry1 Ac & Cry2Ab-MON 15985)	South Zone
6	JK Agrigenetics Ltd.	JK COMMANDER Bt (JKCH-2253 Bt) (Cry1Ac-JK Event 1)	South Zone
7	JK Agrigenetics Ltd.	JK KANAKADURGA Bt (JKCH-2004 Bt) (Cry1Ac-JK Event 1)	South Zone
8	JK Agrigenetics Ltd.	JK SUPER STAR Bt (JKCH-2247 Bt) (Cry1 Ac-JK Event 1)	South Zone
9	Ajeet Seeds Ltd.	ACH-5 (Ajeet 5) BGII, ACH-6 (Ajeet 6) BGII, Paramveer (ACH-12-2 BGII (Cry1 Ac & Cry2Ab-MON 15985)	South Zone
10	Solar Agrotech Pvt Ltd	Mahasangram BGII, Senapati BGII, Solar 76 BGII, Solar 75 BGII (Cry1Ac & Cry2Ab-MON 15985)	South Zone
11	Palamoor Seeds	PCH-66Bt, PCH-55Bt, PCH-44Bt, PCH-22Bt (Cry1Ac- JK event1)	South Zone
12	Safal Seeds & Biotech Ltd. *	SSB-71Bt, SSB-72Bt (GFM Cry1 A gene)	South Zone
13	Safal Seeds & Biotech Ltd. *	SBCH-311Bt (GFM Cry1A gene)	South Zone
14	Super Seeds Pvt. Ltd.	Super-511BGII, Super -544BGII (Cry1Ac & Cry2 Ab) MON 15985	South Zone
15	Kaveri Seeds Ltd.	KCH-100BGII, KCH-172BGII, KCH-189BGII, KCH-311BGII (Cry1 Ac & Cry2 Ab, MON 15985)	South Zone
16	Ganga Kaveri Seeds Pvt. Ltd.	GK 228 BGII, GK 238 BGII, GK 239 BGII, GK 241 BGII (Cry1 Ac & Cry2 Ab MON 15985)	South Zone
17	Bayer Biosciences Pvt Ltd	SP1136 BI (BGI) (Cry 1Ac gene, Event MON 531), SP1170 B2, SP7147 B2, SP7157 B2 & SP7196 B2 (BGII) (Cry1 Ac & Cry2 Ab, MON 15985)	South Zone

18	Pravardhan Seeds Pvt. Ltd.	PRCH 701 Bt2, PRCH 703 Bt2, PRCH 704 Bt2, PRCH 709 Bt2, PRCH 710 Bt2, PRCHB 601 Bt2, PRCHB 602 Bt2 (<i>cry1Ac</i> & <i>cry2Ab</i> genes MON 15985), PRCH 724 Bt, PRCH 725 Bt (<i>cry1Ac</i> gene (Event MON 531))	South Zone
19	Prabhat Agri Biotech Ltd.	PCH 9613 Bt 2, PCH 9614 Bt 2, PCH 9616, PCH 9619 Bt 2, PCH 9620 Bt2, PCHB 9969 Bt2(<i>Cry1Ac</i> & <i>Cry2Ab</i> , MON 15985)	South Zone
20	Nuziveedu Seeds pvt. Ltd.	NCS 9014 Bt 2, NCS 9015 Bt 2, NCS 9025 Bt2, NCS 9028 Bt2, NCS 9030 Bt2, NCS 950 Bt2, NCS 954 Bt2, NCS 955 Bt2, NCS 929 Bt2, NCS 138 Bt2, NCS 856 Bt2, NCS 858 Bt2, NCHB 9901 Bt 2, NCHB 9902 Bt2, NCHB 9903 Bt2, NCHB 9904 Bt2, NCHB 9905 Bt 2, NCHB 990 Bt 2, NCHB 991 Bt 2 (<i>Cry1Ac</i> & <i>Cry2Ab</i> , MON 15985)	South Zone
21	Krishidhan Seeds Ltd.	KDCHH 553 BGI (<i>Cry1Ac</i> - Event MON 531)	South Zone
22	Krishidhan Seeds Ltd.	KDCHH 641 BG II (<i>Cry1Ac</i> & <i>Cry2Ab</i> -MON 15985)	South Zone
23	Krishidhan Seeds Ltd.	KDCHH 9810 BG II (<i>Cry1Ac</i> & <i>Cry2Ab</i> -MON 15985)	South Zone
24	Bioseed Research India Pvt. Ltd.	563-2, 7211-2, 7213-2, 7215-2 BG II (<i>Cry1Ac</i> & <i>Cry2Ab</i> -MON 15985)	South Zone
25	Seedworks International Pvt. Ltd	SWCH 4776 BGII, SWCH 4823 BGII, SWCH 4746 BGII, SWCH 4753 BG II, SWCH 4765 BG II, SWCH 4790 BGII, SWCH 4800 BGII, SWCH 4749 BG II, SWCH 4731 BGII, SWCH 4751 BGII, SWCH 4754 BG II, SWCH 4769 BG II (<i>Cry1Ac</i> & <i>Cry2Ab</i> -MON 15985)	South Zone
26	Amar Biotech Ltd.	ABCH 224 Bt, ABCH 225 Bt, ABCH 227 Bt, ABCH 229 Bt, ABCH 230 Bt, ABCH 231 Bt (<i>Cry 1 Ac</i> - MON 531), ABCH 240 Bt, ABCH 241 Bt(BGII & <i>Cry1Ac</i> & <i>Cry2Ab</i> -MON 15985), ABCH 243 Bt, ABCH 244 Bt, ABCH 245 Bt, ABCH 246 Bt, ABCH 247 Bt, ABCH 248 Bt, ABCH 252 Bt, ABCH 254 Bt, ABCH 256 Bt (BGII - <i>Cry1Ac</i> & <i>Cry2Ab</i> -MON 15985)	South Zone
27	Xylem Seeds Pvt. Ltd	NSPL 252 BG II, NSPL 531 BG II, NSPL 2223BGII (BG II , <i>Cry1Ac</i> & <i>Cry2Ab</i> - MON 15985)	South Zone
28	JK Agri Genetics Ltd	JKCH 99 DOUBLE Bt (JKCH 99 BG II) (<i>Cry1Ac</i> & <i>Cry2Ab</i> - MON 15985)	South Zone
29	JK Agri Genetics Ltd	JKCH 2245 DOUBLE Bt (JKCH 2245 BG II) (<i>Cry 1 Ac</i> & <i>Cry 2 Ab</i> -MON 15985)	South Zone

30	JK Agri Genetics Ltd	JK DURGA DOUBLE Bt (JK Durga BG II) (Cry1Ac & Cry2Ab-MON 15985)	South Zone
31	JK Agri Genetics Ltd	INDRA VAJRA DOUBLE Bt (Indra Vajra BG II) (Cry1Ac & Cry2Ab-MON 15985)	South Zone
32	JK Agri Genetics Ltd	INDRA VAJRA Bt (Event-1 Cry1Ac)	South Zone
33	Kohinoor Seeds Fields India Pvt. Ltd.	KSCH 201, KSCH 204 (Cry 1Ac- MON 531) & KSCH 207 (Cry1Ac & Cry2Ab-MON 15985)	South Zone
34	Namdhari Seeds Pvt. Ltd	NAMCOT 610 BGII, NAMCOT 622 BGII, NAMCOT 803 (HB) BG II (Cry1Ac & Cry2Ab-MON 15985)	South Zone
35	Kaveri Seeds Company Ltd.	KCH-108 BGII, KCH-111 BGII, KCH-144 BGII, KCH-711 BGII (Cry1Ac & Cry2Ab-MON 15985)	South Zone
36	Rasi Seeds	RCH-656 BGII (Cry1Ac & Cry2Ab- MON 15985)	South Zone
37	Rasi Seeds	RCH-659 BGII (Cry1Ac & Cry2Ab- MON 15985)	South Zone
38	Rasi Seeds	RCHB-625 BGII (Cry1Ac & Cry2Ab- MON 15985)	South Zone
39	Rasi Seeds	RCH-111BGII (Cry1Ac & Cry2Ab- MON 15985)	South Zone
40	Tulasi Seeds Pvt. Ltd	TULASI-162 BGII, TULASI 171 BGII, TULASI 216 BGII, TULASI 234 BGII, TULASI 243 BGII (Cry1Ac & Cry2Ab-MON 15985)	South Zone
41	JK Agri Genetics Ltd	JK SUPER VARUN Bt-(Cry1Ac-Event 1)	South Zone
42	Vibha Agrotech Ltd.	VBCH 1533 BGII, VBCH 1537 BGII, VBCH 1539 BGII, VBCH 1542 BG II, VBCH 1543 BG II, VBCH 1544 BGII (Cry1Ac & Cry2Ab- MON 15985)	South Zone

* Recommended subject to submission of event specific primer sequence details to CICR, Nagpur.

4. The CICR, Nagpur will depute a technical person to collect seed samples of recommended hybrids from open market for scientific scrutiny and verification of the claims of the applicants and the applicants should deposit the fee with CICR and get the fee receipt for record. The applicants/agriculture Departments are not required to send samples separately for event testing/confirmation henceforth for the fresh applications. The CICR, Nagpur would do the testing of 10% samples randomly selected from the samples collected. Rs. 10,000/- has been fixed as the fee per hybrid tested which may be deposited to CICR, Nagpur by the seed companies. The company should submit information regarding the districts wherein the EBAM released hybrid seeds would be available for sale, so as to facilitate random sampling

by CICR. The company should also provide the event specific primer sequence details to CICR, Nagpur for scientific scrutiny and verification of the claims submitted along with the affidavit/s furnished to the Standing Committee.

Kindly acknowledge the receipt of this letter.

Sd/
(Rajalakshmi Muralidharan)
Member-Secretary, Standing Committee &
Scientist-D, DBT

To

1. The Agriculture Commissioner/
Secretary (Agriculture),
Directorate of Agriculture,
Government of Andhra Pradesh,
Hyderabad.
2. The Agriculture Commissioner/
Secretary (Agriculture),
Directorate of Agriculture, Sheshadri Road,
Bangalore, Karnataka.
3. The Agriculture Commissioner/
Secretary (Agriculture),
Department of Agriculture,
Cheupak, Tamil Nadu.

Copy to:

1. The Chairman, GEAC, MoE&F, Paryavaran Bhawan, C.G.O.Complex, Lodi Road, New Delhi-110 003.
2. Member-Secretary, GEAC & Director, CS Division, MoE&F, Paryavaran Bhawan, C.G.O.Complex, Lodi Road, New Delhi-110 003.
3. The Director General, Indian Council of Agricultural Research, Krishi Bhawan, New Delhi - 110 001.
4. Secretary, Department of Agriculture & Cooperation, Krishi Bhawan, New Delhi – 110 001.
5. The Chief Secretary & Chairman, SBCC, Govt. of Andhra Pradesh, Secretariat, Hyderabad, A.P.
6. Director of Research, Acharya NG Ranga Agricultural University, Rejendra Nagar, Hyderabad-500030, Andhra Pradesh.
7. The Chief Secretary, Government of Karnataka, Bangalore.
8. Director of Research, University of Agricultural Sciences (UAS), Krishinagar, Dharwad-580005, Karnataka.
9. Director of Research, GKVK Campus, University of Agricultural Sciences (UAS) GKVK, Bangalore-560065, Karnataka.
10. The Chief Secretary, Government of Tamil Nadu, Chennai.
11. Director of Research, Tamil Nadu Agricultural University, Coimbatore, T.N.
12. Director of Research, Tamil Nadu Agricultural University (TNAU), Coimbatore (TN) 641003.
13. Director, Central Institute for Cotton Research (CICR), Post Box No.2. Shankar Nagar Post, Nagpur- 440010 (Maharashtra)

14. Dr. P. Balasubramanian, Professor, Department of Plant Molecular Biology & Biotechnology, Centre for Plant Molecular Biology, Tamil Nadu Agricultural University, Coimbatore – 641 003.
15. Dr. Dilip Monga, Head, CICR Regional Station, Central Institute of Cotton Research, Sirsa – 125 055, Haryana.
16. Dr. K.R. Kranthi, Director, Central Institute for Cotton Research (CICR), Post Box No. 2, Shankar Nagar P.O., Nagpur – 440 010.
17. Dr. N. Gopalakrishnan, Head, CICR Regional Research Station, Coimbatore, Tamil Nadu.
18. Dr. K.K. Tripathi, Scientist-G & Member Secretary- RCGM, DBT, New Delhi.
19. Guard file.

Sd/
(Rajalakshmi Muralidharan)
Member-Secretary, Standing Committee &
Scientist-D, DBT

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4. Secretary, Department of Agriculture & Cooperation, Krishi Bhawan, New Delhi – 110 001.
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