

OFFICE MEMORANDUM

Subject: Recommendation of the Standing Committee for Bt cotton hybrids expressing approved events namely Event MON 531 (*cryIAc*); Event MON 15985 (*cryIAc* + *cry2Ab*), GFM (*cryIAb* + *cryAc*) and JK Event 1 (*cryIAc*) eligible for commercial release by the State Agriculture Departments in **Central 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 **fourth meeting held on 07.05.2010** 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 **central zone (Gujarat, Maharashtra, M.P., Orissa & Banswara region of South Rajasthan)** 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 as given in the recommendation letter	Name of the Company	Name of the Hybrid	Zone
6	Super Seeds Pvt. Ltd.	Super -721BGII, Super -931BGII, Super -965BGII, Super -971BGII (Cry1Ac & Cry2 Ab2-MON 15985)	Central Zone
7	Super Seeds Pvt. Ltd.	Super -511BGII, Super -544BGII (Cry1Ac & Cry2 Ab2-MON 15985)	Central Zone
17	Vibha Agrotech Pvt. Ltd.	VBCH-1533BGII, VBCH- 1537BGII,VBCH-1539BGII VBCH-1542BGII, VBCH-1543BGII,VBCH-1544BGII (Cry1 Ac & Cry2 Ab2-MON 15985)	Central Zone
18	Vibha Agrotech Pvt. Ltd.	VBCHB-1201BG, VBCHB-1202BG, VBCHB-1203BG (Cry1 Ac-MON 531)	Central Zone
19	Ganga Kaveri Seeds	GK-228 BGII, GK-238 BGII,GK-244 BGII (Cry1 Ac & Cry2 Ab-MON 15985)	Central Zone
20	Tulasi seeds	TULASI-252 BGII, TULASI 171 BGII, TULASI 45BGII,TULASI 333 BGII (Cry1 Ac & Cry2 Ab-MON 15985)	Central Zone
23	Seed Works International Pvt. Ltd.	SWCH-4823 BGII, SWCH-4746 BGII, SWCH-4753 BGII, SWCH-4765 BGII, SWCH-4790 BGII, SWCH-4800 BGII, SWCH-4776 BGII, SWCH-4749 BGII,SWCH-4731BGII, SWCH-4751 BGII, SWCH-4754 BGII, SWCH-4769 BGII. (Cry1 Ac & Cry2 Ab-MON 15985)	Central Zone
26	Kaveri Seeds Ltd.	KCH 100 BGII, KCH-172BGII, KCH-189BGII, KCH 311BGII (Cry1 Ac & Cry2 Ab2-MON 15985)	Central Zone
30	Rasi Seeds Pvt. Ltd	RCH386 BGII (Cry1 Ac & Cry2 Ab2-MON 15985)	Central Zone
31	Rasi Seeds Pvt. Ltd	RCH 656 BGII (Cry1 Ac & Cry2 Ab2-MON 15985)	Central Zone
32	Rasi Seeds Pvt. Ltd	RCH 659BGII (Cry1 Ac & Cry2 Ab2-MON 15985)	Central Zone
34	Global Transgene Ltd.	NCEH-29, NCEH-24, NCEH-210 (event GFM Cry 1A)	Central Zone
37	Pravardhan Seeds Pvt. Ltd.	PRCH-701Bt2, PRCH-703 Bt2, PRCH-704 Bt2,PRCH-709 Bt2 (Cry1 Ac & Cry2 Ab2-MON 15985)	Central Zone
38	Pravardhan Seeds Pvt. Ltd.	PRCH-724Bt, PRCH-725 Bt, (Cry1 Ac - MON531)	Central Zone
39	Pravardhan Seeds Pvt. Ltd.	PRCHB-601Bt2, PRCHB-602 Bt2, (Cry1 Ac & Cry2 Ab2-MON 15985)	Central Zone

42	Nuziveedu Seeds Pvt. Ltd	NCS 9014Bt2 , NCS 9015 Bt2,NCS 9025 Bt2,NCS 9028 Bt2,NCS 9030 Bt2,NCS 950Bt2 , NCS 954 Bt2,NCS 955 Bt2,NCS 929 Bt2,NCS 138 Bt2,NCS 856Bt2,NCS 858Bt2,NCS 865 Bt2,NCS 866Bt2 (Cry1 Ac & Cry2 Ab-MON 15985)	Central Zone
43	Nuziveedu Seeds Pvt. Ltd	NCHB-9901 Bt2, NCHB-9902 Bt2, NCHB-9903 Bt2, NCHB-9904 Bt2, NCHB-9905 Bt2 (Cry1 Ac & Cry2 Ab-MON 15985)	Central Zone
44	Prabhat Agri Biotech Ltd.	PCHB-9969 Bt2 (Cry1 Ac & Cry2 Ab2-MON 15985)	Central Zone
45	Prabhat Agri Biotech Ltd.	PCH-9613 Bt2, PCH-9614 Bt2, PCH-9616 Bt2, PCH-9619 Bt2, PCH-9620 Bt2 (Cry1 Ac & Cry2 Ab2-MON 15985)	Central Zone
48	Krishidhan Seeds Ltd.	KDCHH-553 BGI(Cry1 Ac-MON 531)	Central Zone
49	Krishidhan Seeds Ltd.	KDCHH-9810 BGII (Cry1 Ac & Cry2 Ab-MON 15985)	Central Zone
50	Krishidhan Seeds Ltd.	KDCHH-641 BGII (Cry1 Ac & Cry2 Ab-MON 15985)	Central Zone
51	Mahyco	MRC-7361 BGII,MRC-7375 BGII, MRC-7377 BGII, MRC-7385BGII, MRC-7387 BGII (Cry1 Ac & Cry2 Ab-MON 15985)	Central Zone
54	Bayer BioScience Pvt. Ltd.	SP7147B2, SP7157B2,SP7196B2 BGII (Cry1 Ac & Cry2 Ab-MON 15985)	Central Zone
57	Bayer BioScience Pvt. Ltd.	SP1171B2(BGII) (Cry1 Ac & Cry2 Ab)	Central Zone
59	Ankur Seeds Pvt Ltd	ANKUR 3224 BGII, ANKUR 3244 BGII, ANKUR 3228 BGII (Cry1 Ac + Cry2 Ab-MON 15985)	Central Zone
63	JK Agrigenetics Ltd.	JK SHIKHAR Bt (JKCH-1305 Bt) JK Event 1 (<i>cryI</i> Ac gene)	Central Zone
64	JK Agrigenetics Ltd.	JK AGNI Bt(JKCH-2022 Bt) JK Event 1 (<i>cryI</i> Ac gene)	Central Zone
65	JK Agrigenetics Ltd.	JK RUBY Bt(JKCH-2246 Bt) JK Event 1 (<i>cryI</i> Ac gene)	Central Zone
70	Bioseed Research India Pvt Ltd	841-2(BGII), 846-2(BGII), 844-2(BGII), 563-2 (BGII), 842-2 (BGII), 847-2 (BGII), 7213-2 (BGII), 7215-2 (BGII) (Cry1Ac&Cry2Ab-MON 15985)	Central Zone
73	Ajeet Seeds Ltd.	ACH-5 BGII, ACH-6 BGII, Paramveer (ACH-12-2 BGII), ACH-52-2 BGII (Cry1Ac&Cry2Ab-MON 15985)	Central Zone
76	Solar Agrotech Pvt Ltd	Mahasangram BGII, Senapati BGII, Solar 76 BGII, Solar 75 BGII(Cry1Ac&Cry2Ab2-MON 15985)	Central Zone

4.1	Palamoor Seeds	PCH-66Bt,PCH-55Bt,PCH-44Bt,PCH-22Bt (Cry1Ac- JK event1)	Central Zone
4.3	Yashoda Hybrid Seeds Ltd.	YRCH-18Bt,YRCH-22Bt,YRCH-36Bt,YRCH-40Bt GFM Cry1A (Cry1Ab&Cry1Ac)	Central Zone
4.5	Safal Seeds & Biotech Ltd.	SBCH-310Bt(Gazab Bt), SBCH-311Bt(GFM Cry1A gene)	Central Zone
4.6	Safal Seeds & Biotech Ltd.	SSB-71Bt, SSB-72Bt(GFM Cry1A gene)	Central Zone
4.11	Ankur Seeds Pvt. Ltd.	ANKUR 5642 BGII & ANKUR 3066 BGII (Cry1 Ac + Cry2 Ab, MON 15985)	Central Zone
4.32	Amar Biotech Ltd.	ABCH 223Bt,ABCH 224Bt,ABCH 225Bt,ABCH 226Bt,ABCH 227Bt,ABCH 228Bt,ABCH 229Bt,ABCH 230Bt,ABCH 231Bt (BGI - Cry1Ac- MON 531),ABCH 236Bt,ABCH 237Bt (BGI & Cry1Ac- MON 531),ABCH 243Bt ,ABCH 244Bt ,ABCH 245Bt ,ABCH 246Bt ,ABCH 247Bt ,ABCH 248Bt ,ABCH 252Bt,ABCH 254Bt ,ABCH 256Bt (BGII & Cry1 Ac + Cry2Ab2- MON 15985),ABCH 240Bt ,ABCH 241Bt (BGII & Cry1 Ac + Cry2Ab2- MON 15985)	Central Zone
4.34	Xylem Seeds Pvt. Ltd	NSPL 252 BG II, NSPL 531 BG II, NSPL 2223BGII (BG II ,Cry 1 Ac & Cry 2 Ab- MON 15985)	Central Zone
4.35	JK Agri Genetics Ltd	JKCH 99 DOUBLE Bt (JKCH99 BG II) <i>cry1Ac</i> & <i>cry2Ab</i> genes (MON 15985)	Central Zone
4.36	JK Agri Genetics Ltd	JKCH 2245 DOUBLE Bt (JKCH 2245 BGII), <i>cry1Ac</i> & <i>cry2Ab</i> genes (MON 15985)	Central Zone
4.37	JK Agri Genetics Ltd	JK DURGA DOUBLE Bt (JKDURGABGII) <i>cry1Ac</i> & <i>cry2Ab</i> genes (MON 15985)	Central Zone
4.38	JK Agri Genetics Ltd	INDRA VAJRA DOUBLE Bt (INDRA VAJRA BGII) <i>cry1Ac</i> & <i>cry2Ab</i> genes (MON 15985)	Central Zone
4.39	JK Agri Genetics Ltd	JK INDRA VAJRA Bt JK Event 1 (<i>Cry1Ac</i> gene)	Central Zone
4.46	Kohinoor Seed Fields India Pvt. Ltd.	KSCH 201 BGI, KSCH 204 BGI (Cry 1 Ac- MON 531) & KSCH 207 BG II (Cry 1 Ac & Cry 2 Ab2-MON 15985)	Central Zone
4.49	Namdhari Seeds Pvt. Ltd	NAMCOT 621 BGII, NAMCOT 627 BGII, <i>cry1Ac</i> & <i>cry2Ab</i> genes (MON 15985)	Central Zone

4.51	Rasi Seeds	RCH-134 Bt (Cry 1 Ac- MON 531)	Central Zone
4.57	Navkar hybrid seeds Pvt. Ltd.	ACH-1575 Bt, Cry 1 Ab + Cry 1Ac (GFM Cry 1A)	Central Zone
4.59	JK Agri Genetics Ltd	JK SUPER VARUN Bt-Cry 1 Ac-Event 1)	Central Zone

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 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,
Krishi Bhawan, Sector-10 A,
Gandhinagar – 382 010, Gujarat.
2. The Agriculture Commissioner/
Secretary (Agriculture),
Department of Agriculture,
Maharashtra State, Central Building,
Pune (Maharashtra).
3. The Agriculture Commissioner/
Secretary (Agriculture),
Department of Agriculture,
Vidhyachal Bhawan,
Near Secretariat,
Bhopal (MP).
4. The Agriculture Commissioner/
Secretary (Agriculture),
Department of Agriculture,
Govt. of Orissa, Bhubaneshwar,
Orissa.

5. The Agriculture Commissioner/
Secretary (Agriculture),
Department of Agriculture,
Jaipur, Rajasthan.

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, Government of Gujarat, Gandhinagar.
6. Director of Research, Navsari Agricultural University NAU, Navsari, Gujarat.
7. Director of Research, Anand Agricultural University (AAU), Anand, Gujarat
8. Director of Research, Sardar Kushinagar Dantiwara Agricultural University (SKDAU), Palanpur, Distt. Banaskanta, Gujarat.
9. Director of Research, Junagarh Agricultural University (JAU) Junagarh, Gujarat.
10. The Chief Secretary, Government of Maharashtra, Mumbai.
11. Director of Research, Panjabrao Deshmukhrao Krishi Vidhyapeeth (PDKV), Akola, Maharashtra.
12. Director of Research, Marathwada Agricultural University (MAU), Parbhani, Maharashtra.
13. Director of Research, Mahatma Phule Krishi Vidhayapeeth (MPKV), Rahuri, Maharashtra.
14. The Chief Secretary, Government of Madhya Pradesh, Bhopal, M.P.
15. Director of Research, Jawaharlal Nehru Krishi Vishwa Vidhyalaya (JNKVV), Jabalpur, M.P.
16. Director of Research, Gwalior Agriculture University, Gwalior, M.P.
17. The Chief Secretary & Chairman, SBCC, Government of Orissa, Bhubaneswar, Orissa.
18. Director of Research, OUAT, Bhubaneswar, Orissa.
19. Director of Agriculture, Government of Orissa, Bhubaneswar, Orissa.
20. The Chief Secretary, Government of Rajasthan, Jaipur.
21. Director of Agriculture, Rajasthan State, Jaipur.
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23. Director, Central Institute for Cotton Research (CICR), Post Box No.2. Shankar Nagar Post, Nagpur- 440010 (Maharashtra)
24. Dr. P. Balasubramanian, Professor, Department of Plant Molecular Biology & Biotechnology, Centre for Plant Molecular Biology, Tamil Nadu Agricultural University, Coimbatore – 641 003.
25. Dr. Dilip Monga, Head, CICR Regional Station, Central Institute of Cotton Research, Sirsa – 125 055, Haryana.
26. Dr. K.R. Kranthi, Director, Central Institute for Cotton Research (CICR), Post Box No. 2, Shankar Nagar P.O., Nagpur – 440 010.
27. Dr. N. Gopalakrishnan, Head, CICR Regional Research Station, Coimbatore, Tamil Nadu.
28. Dr. K.K. Tripathi, Scientist-G & Member Secretary- RCGM, DBT, New Delhi.
29. Guard file.

Sd/
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Member-Secretary, Standing Committee &
Scientist-D, DBT