

# GOVERNMENT OF KARNATAKA

(AGRICULTURE DEPARTMENT)

No.SFS-8/Bt.Cotton/Comp/2013-14

Seshadri Road, Bangalore,  
Dated 22-03-2014.

Sub:- Imposing ban on Sale of Bt cotton seeds  
by M/s Mahyco and Black listing the  
company - reg.

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## PREAMBLE:-

Cotton is one of the important commercial crop in Karnataka. Farmers of the state are growing Bt. cotton in a larger area in recent years. More than 95% of the cotton area is covered by Bt. cotton. Bt. cotton is mainly cultivated under rainfed as well as in assured rainfall area. Farmers are getting better yield by adopting appropriate crop management practices and there by getting better economic returns. During kharif 2013, Bt. cotton was grown in an area of 5.10 lakh hectares in the State.

As per Section 5 of Seed Act 1966, Government of India is vested with the powers to notify different crops / varieties which are to be grown in the Country. Also as per Section 6a of Seed Act 1966, Government of India also fixes minimum germination percentage, genetic purity and other parameters. Also, under Section 6 b of Seed Act 1966, every seed producing agency is required to display the label regarding minimum germination percentage, genetic purity and other related aspects on seed containers.

Government of India vide order No.16/1/2006 dated 29-08-2006 has permitted the cultivation of MRC-7351 BG-II Bt. cotton as commercial crop to M/s Mahyco in the South Zone of the country( Andra Pradesh, Karnataka & Tamilnadu). The respective seed producing company will directly supply the seeds through their dealers appointed by them.

Government of India clearly stated in its permission order that, the applicant(Seed producing agency) shall undertake an awareness and education programme inter-alia through development and distribution of educational material on Bt. cotton for farmers, dealers and others. Further, the applicant (Seed supplying Agency) shall also continue to undertake studies on possible impacts on non target insects and crops and report back to the GEAC annually.

The Department of Agriculture is not directly involved either in recommending any particular Bt. cotton hybrids or indulged in the sales. Farmers will choose the Bt. cotton hybrids as per their choice. The Department of Agriculture will monitor the quality control aspects besides helping district administration in maintaining law and order situations. The seed inspectors notified by State Government will draw seed samples and subject for quality analysis to ascertain the quality of seed and initiate actions as per provisions of Seed Act 1966, Seed Rules 1968 and Seed Control Order 1983 against the offenders.

The seed supplying agencies are required to supply the literature containing special features of crop/varieties, cultivation practices to be followed by farmers, yield potentiality, tolerance/resistance for different pests and diseases for the benefit of the farmers.

As per the section 7 of Seed Act 1966 and rule 7 of seed rule 1968, the seed supplying company/person is responsible for the accuracy of the details contained in the label. The said crop/varieties/hybrids are expected to perform in the field as per the details of the label.

M/s Mahyco has sold 5.63 lakh packets of MRC-7351 and Nikkiplus Bt. cotton hybrids during kharif 2013 in Karnataka State. Accordingly, MRC-7351 was grown in 1.39 lakh hectares and Nikkiplus in 0.12 lakh hectares.

Farmers have complained in 7 districts of Karnataka namely: Haveri, Belgaum, Davanagere, Chitradurga, Dharwad, Bellary and Gadag districts, to the Departmental Officers that MRC-7351 and Nikkiplus cotton seeds supplied by M/s Mahyco company during kharif 2013 have failed to give expected yields. Also a delegation of the farmers had staged dharana on 22-09-2013 when Hon'ble Chief Minister of Karnataka visited University of Agricultural Sciences, Dharwad on the occasion of krishimela.

In order to ascertain the exact scientific reasons for the poor performance of MRC-7351 and Nikkiplus, field inspection teams were constituted comprising Revenue, Agriculture, Representatives of Mahyco and Scientists from State Agricultural Universities. The team headed by Deputy Commissioner(DC) was also formed for detailed scrutiny of the report of the survey team and to submit the reports along with their opinion to Department of Agriculture. As per the findings of the survey team 58,195 hectares of Bt cotton area has suffered crop yield loss of more than 50 percent covered in 1983 villages involving 54,150 farmers in 7



districts. MRC-7351 and Nikkiplus has failed to give expected yield. The findings of Scientists reports in this regard is as follows:

- Scientists have undertaken field survey in 61 seed lot plots and observed that in 28 seed lot plots there is a difference in plant characteristics compared to the original MRC-7351. Though the density of the trichomes are found to be that of MRC-7351 the shape and size of the bolls are not observed as per characteristics of typical MRC-7351. The bolls of MRC-7351 are usually bigger in size and ovate in shape. But the bolls in some fields were round in shape.
- There is a difference in plant height, shape and size of the bolls. crop affected by Jassids were seen. Scientists have opined that under close observation the crop seems to be grown from F-2 generation seeds.
- In Tirlapura village of Navalagunda taluk in Dharwad district, the MRC-7351 crop grown from seed lot no.AKB 101119x, ZKB100804x, AKB101049x the plants are not resembling the true character of MRC-7351. The growth of these plants are very much affected and contain less number of bolls.
- In Navalgund taluk of Dharwad district, the crop grown from BKC100213x the density of trichomes on the leaves were not resembling MRC-7351.

- In Kavalageri village of Dharwad taluk, the crop grown from 55100154x seed lot, >40% of the plants were found to be different.
- In Herthy village of Gadag taluk, the plants of BKC 100253x seed lot the bolls of plants were not ovate which is typical character of MRC-7351 instead bolls were round and different from original character.
- In Kanavi village of Gadag taluk, the crop grown from BKC100158x, BKC100391x seed lots, the plants were differing each other and suspected to be that of F-2 generation.
- In Mulugunda village of Gadag taluk, the crops from seed lot ARB100059x, BKC100155x, BKC100207x, the plants were different from each other and there were mixed plants and found to be different from MRC-7351.
- In Battur village of Shirahatti taluk of Gadag district, the crop grown from BKD100064x seed lot the bolls were different from that of MRC-7351.
- In Hirekumbi village of Savadatti taluk of Belgam district there was a mixture of different cotton plants in the seed lot ABK100004x.
- In Savadatti taluk of Belgaum district, the crop grown from seed lot AKB101154 the plants were not having the typical character of MRC-7351.

- The literature published & supplied along with the seed containers by Mahyco indicates that MRC-7351 has tolerance for sucking pests, but under field observation, this variety was found to be more susceptible for sucking insects compared to other Bt. hybrids grown under same set of field conditions. Also, MRC-7351 was observed to be more susceptible to myrid bug and cotton midge under same set of field conditions and it has been pointed out in the Scientists reports.

It is observed that M/s. Mahyco has not conducted any awareness campaign or training programme for effective management of pests and diseases. Therefore M/s Mahyco has clearly violated the instructions given by Govt. of India at the time of issue of permission of commercial sales.

MRC-7351 variety was developed by Mahyco in its own R&D unit and before releasing for commercial sales, the seeds were processed and packed and its genetic purity and quality was declared. Therefore, M/s. Mahyco is solely responsible for the lapses observed in the field survey.


As per Sec.13(1) of Seed act 1966 and rule 22 of Seed rule 1968, the Director of Agriculture is notified as seed inspector in the state.

The Bt cotton hybrid MRC-7351 and Nikkiplus supplied by Mahyco has failed to give expected yields during Kharif 2013. In Karnataka 54,157 farmers who have grown Bt cotton crop supplied by Mahyco in 58,195 hectares have suffered yield loss of more than 50 percent. Hence, this order.



## ORDER

As per the powers vested under Section 14(1)(e) of Seed act 1966, I, Dr.B.K. Dharmarajan, Director of Agriculture and Seed Inspector having the jurisdiction of State here by order that the sales of Bt cotton hybrids by M/s. Maharastra Hybrid Seed Company is banned until further orders in Karnataka State. Further, M/s. Mahyco company has been black listed, preventing them in participating in any tender process under taken by Karnataka state Department of Agriculture until further orders.

  
 (Dr.B.K. Dharmarajan)  
 Director of Agriculture

To

The Managing Director,  
 M/s. Maharastra Hybrid Seeds Company Ltd.,  
 Resham bhavan, 4th floor  
 78, Veer nariman Road  
 Mumabai-400 020

Copy to,

1. Private Secretary to Hon'ble Agriculture Minister with a request to bring to the notice of the Hon'ble Agriculture Minister.
2. Private Secretary to Chief Secretary, Government of Karnataka, Vidhana soudha, Bangalore with a request to bring to the notice of the Chief Secretary.
3. Private Secretary to Additional Chief Secretary and Development Commissioner, Government of Karnataka, Vidhana soudha, Bangalore with a request to bring to the notice of the Additional Chief Secretary and Development Commissioner.
4. Private Secretary to Principal Secretary to Agriculture Department, M.S building, Bangalore with a request to bring to the notice of the Principal Secretary.
5. PS to Commissioner for Agriculture with a request to bring to the notice of the Commissioner.

  
 Director of Agriculture

Copy to all District Joint Director of Agriculture for information and necessary action.