

**GOVERNMENT OF INDIA
ENVIRONMENT AND FORESTS
LOK SABHA**

UNSTARRED QUESTION NO:6428
ANSWERED ON:05.05.2010
INEFFECTIVENESS OF BT. COTTON
Das Gupta Shri Gurudas

Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:

- (a) whether the government has conducted any inquiry about the ineffectiveness of first generation of Bt. Cotton against Pink bollworm.;
- (b) if so, the outcome of the inquiry;
- (c) the action taken by the Government in this regard; and
- (d) the steps taken/proposed to be taken by the Government to ensure that the second generation would not be ineffective against any insects?

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT AND FORESTS(SHRI JAIRAM RAMESH)

(a) to (c) The Central Institute for Cotton Research (CICR), Nagpur has been notified as the nodal institute to monitoring the baseline susceptibility of bollworm to Bt protein since 2002. Accordingly, CICR is implementing a technical programme to conduct pest surveillance, resistance monitoring and monitor the field efficacy of Bt cotton on bollworms, in collaboration with the technology developers and support of this Ministry. Scientific enquiry conducted by CICR on the performance of the first generation pink bollworm and the data generated under the All India Coordinated Cotton Improvement Project (2009-10) has concluded that the first generation Bt cotton is still very effective on the pink bollworm.

(d) Insect resistance management programs (IRM) have been developed by the CICR to ensure that Bt cotton including the second generation Bt cotton continues to be effective for the longest possible time. The IRM programme includes regular monitoring of bollworm resistance to the Bt toxins expressed in Bt cotton including Bollgard-II; use of the parasitoid in Bt cotton fields for pink bollworm management; recommend planting of desi cotton/conventional non-Bt cotton and late planted bhendi as refugia crops; timely termination of the crop and avoiding ratoon harvests; destruction of cotton stalks after harvest; and, use of pheromone traps for regular monitoring and initiate control interventions based on economic threshold levels of 8 moths per trap per night.