

**GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA**

UNSTARRED QUESTION NO:3283
ANSWERED ON:30.11.2010
GM COTTON
Kumar Shri P.

Will the Minister of AGRICULTURE be pleased to state:

- (a) whether genetically modified cotton is losing the ability to fight a common pest;
- (b) if so, the details thereof;
- (c) whether the ICAR and the Central Institute of Cotton Research (CICR) have carried out separate studies to find out whether the pink boll worm which attacks cotton has developed resistance to Bollgard I, a Bt. Cotton variety that helped push up domestic cotton yield; and
- (d) if so, the details thereof?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND MINISTER OF STATE IN THE MINISTRY OF CONSUMER AFFAIRS, FOOD & PUBLIC DISTRIBUTION (PROF. K.V. THOMAS)

- (a) & (b): Genetically modified Bt transgenic cotton hybrids have so far overcome the pest problems caused by cotton bollworm complex namely *Helicoverpa armigera*, *Earias vittella* and *Pectinophora gossypiella*. The studies revealed that the first generation Bt cotton was found to be effective in controlling the pink bollworm and that there has been only negligible changes in its control efficacy over the past 8 years.
- (c) & (d): Resistance monitoring studies with Cry1Ac toxin (Bt toxin expressed in Bt cotton) at Central Institute for Cotton Research (CICR), Nagpur of the Indian Council of Agricultural Research (ICAR) indicated minimal survival of pink bollworm larvae in laboratory, thus indicating that the pink bollworm has not developed resistance to Bollgard I.