

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

UNSTARRED QUESTION NO:1249

ANSWERED ON:08.08.2011

TESTING OF SEEDS

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

- (a) whether the indigenously developed /genetically modified seeds have been tested for their adaptability and safety;
- (b) if so, the details thereof along with the outcome;
- (c) whether in view of the protest made in this regard, the Government has any action-plan for the certification and use of these genetically modified seeds;
- (d) if so, the details thereof;
- (e) whether the Government has recently convened a meeting in regard to Bt Brinjal in the country;
- (f) if so, the details thereof; and
- (g) the steps taken by the Government in this regard ?

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT AND FORESTS (SHRIMATI JAYANTHI NATARAJAN)

(a) The genetically modified (GM) seeds of Bt cotton and Bt brinjal have been tested for their stability, efficacy and safety. The environmental safety assessment includes studies on pollen escape out- crossing, aggressiveness and weediness, effect of the gene on non-target organisms, presence of the protein in soil and its effect on soil micro-flora, confirmation of the absence of Terminator Gene and baseline susceptibility studies. The food and feed safety assessment studies include allergenicity and toxicological studies dietary exposure and substantial equivalence using test protocols such as: protein thermal stability, pepsin digestibility, molecular characterization, compositional assessment, acute oral toxicity (mice or rat), 90-day sub-chronic rat feeding, and livestock feeding.

(b) to (d) Bt cotton expressing six events have been approved for commercial cultivation. In case of Bt brinjal, the Ministry has imposed a moratorium on the basis of the outcome of the public consultation organised at seven locations during January-February 2010.

(e) to (g) As a follow up to the moratorium on Bt brinjal, a meeting of the Genetic Engineering Appraisal Committee (GEAC) to consult with experts and scientists on the safety of Bt. Brinjal was held on April, 27, 2011. Several of the Experts recommended "Limited release of Bt seeds to identified farmers under strict expert supervision should be undertaken to evaluate its performance in public space. In the interim period additional studies may be prescribed". But some experts wanted additional studies to be done before release. The GEAC has decided to have further consultation with experts on the suggestions for additional studies.