

GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

**LOK SABHA**  
**UNSTARRED QUESTION NO. 898**  
TO BE ANSWERED ON 01.03.2016

**GM Seeds**

898. SHRI SHRIRANG APPA BARNE:  
SHRIMATI K. MARAGATHAM:  
SHRIMATI KAVITHA KALVAKUNTALA:  
SHRI M.B. RAJESH:  
SHRI CHARANJEET SINGH RORI:

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

- (a) the present status regarding cultivation and commercial release of Genetically Modified (GM) crops/seeds including GM mustard seeds in the country;
- (b) whether the Genetic Engineering Appraisal Committee (GEAC) has scientifically examined all aspects regarding release of GM seeds and its likely impact on the environment, human beings and animals including toxicity studies, odds of gene flow into the environment, etc.;
- (c) if so, the details and findings thereof along with the reaction of the Government thereto;
- (d) whether farmers' groups and environmental activists have been opposing the field trials and commercial release of GM crops including GM mustard in the country; and
- (e) if so, the reaction of the Government thereto along with the details of regulatory mechanisms and checks to enforce bio-safety for such crops/produce?

**ANSWER**

MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT, FOREST AND CLIMATE CHANGE

(SHRI PRAKASH JAVADEKAR)

(a) As of date, Bt cotton expressing five events is the only GM crop under commercial cultivation. The GEAC has recently received the application for environmental release of transgenic mustard hybrid DMH- developed using barnase, barstar and bar genes by the Centre for Genetic Manipulation of Crop Plants (CGMCP), University of Delhi (South Campus).

(b)&(c) The biosafety dossier submitted by the applicant includes detailed studies to assess the impact on environment and human health in accordance with the protocols prescribed by the Review Committee on Genetic Manipulation and Genetic Engineering Appraisal Committee. These include expression studies, toxicity assessment, sub-chronic toxicity assessment, allergenicity, compositional analysis and nutritional value, weediness potential, crossability, pollen flow/ gene flow studies, impact of soil organisms etc. The GEAC in its meeting held on 5.2.2016 has directed the applicant to revise the BIOSAFETY

DOSSIER as per the comments/suggestions of the Sub-committee constituted by the GEAC and inputs received from the Department of Biotechnology.

(d)&( e) The GEAC has received representations from some NGOs and farmers associations expressing concerns regarding the safety of transgenic mustard. The GEAC is following a case by case assessment of GM crops which takes into account concerns related to safety, efficacy, stability and agronomic performance of the GM seeds.

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