

**GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA**

UNSTARRED QUESTION NO:5331

ANSWERED ON:28.04.2010

BIOTECH RESEARCH FOR DEVELOPMENT OF NEW CROPS

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Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) whether the Government proposes to give special impetus for research in bio-technology to develop new variety of crops which consumes less water;
- (b) if so, the details thereof and the action taken in this regard;
- (c) whether the Government has allocated special funds for the purpose; and
- (d) if so, the details thereof and the success achieved in developing such crops?

Answer

MINISTER OF THE STATE IN THE MINISTRY OF SCIENCE & TECHNOLOGY AND MINISTER OF THE STATE IN THE MINISTRY OF EARTH SCIENCES (PRITHVIRAJ CHAVAN)

(a) & (b) The Government is promoting research in Biotechnology to develop crops that can sustain limited water conditions or consume less water. Indian Council of Agricultural Research and other institutions are engaged primarily to develop transgenic rice, mustard and tomato with improved resistance to drought. Recently, few other crops have been added namely cotton, groundnut, chickpea and pigeon pea and transgenic as well as molecular breeding approaches are being used under these efforts. A programme has also been initiated on Allele Mining for discovery of new genes useful for developing improved crop genotypes.

(c) No special allocation of funds has been made for this purpose. Such research is being supported under various schemes related to Agricultural Biotechnology.

(d) Few Genes responsive to water deficit conditions have been identified and institutions are making efforts to transfer them into crops and assess their utility. Preliminary studies on rice pyramided with Quantitative Trait Loci for root traits and water use efficiency showed that it could be grown using reduced quantity of water. Such material has been developed by integrating conventional approaches with marker assisted breeding. In some cases, transgenics have also been developed which are at different stages of testing.