GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA

UNSTARRED QUESTION NO:2118
ANSWERED ON:10.03.2010
DEVELOPMENT OF CROP VARIETIES USING RADIDATION TECHNIQUES
Singh Shri Jagada Nand

Will the Minister of ATOMIC ENERGY be pleased to state:

(a) the crop varieties developed during each of the last three years using radiation techniques;

(b) whether these crop varieties have been released for commercial production after field trials in agriculture fields;

(c) if so, the details thereof; and

(d) the steps taken by the Government to develop more seeds by adopting this technique?

Answer

THE MINISTER OF STATE, INDEPENDENT CHARGE FOR SCIENCE & TECHNOLOGY AND EARTH SCIENCES, MINISTER OF STATE FOR PMO, PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS AND PARLIAMENTARY AFFAIRS(SHRI PRITHVIRAJ CHAVAN):

(a) List of crop varieties developed during the last three years is as under:

Crop	Variety	Year of	Released for	Remarks
Groundnut	TDG-39	2009	Karnataka	Large seed, Kharif season
Mungphali (Arachis hypogaea)	TBG-39	2008	Rajasthan	
	TG-51	2008	W. Bengal Orissa Bihar & N.E. States	Rabi-Summer, Early maturity (~ 90 days)
	TGL-45	2007	Maharashtra	Large seed, Kharif, season
Soybean (Glycine max)	TAMS 98-21	2007	Maharashtra	High yeielding resistant to bacterial pustules, myrothecium leaf spot and soybean mosaic virus diseases
Mustard Rai (Brassica juncea)	TPM-1	2007	Maharashtra	Yellow seed tolerant to powdery mildew
Sunflower Suraj mukhi (Helianthus annuus)	TAS-82	2007	Maharashtra	Black seed coat tolerant

				to drought
Greengram (Vigna radiate)	TM-96-2 Trombay Pesara)	2007	Andhra Pradesh (rabi and summer) and rice fallows	Resistant to Powdery mildew and Corynespora leaf spot
	TJM-3	2007	Madhya Pradesh (Kharif and summer)	Resistant to Powdery mildew, Yellow mosaic virus and Rhizoctonia root-rot diseases
Pigeonpea Tur, Arhar (Cajanus cajan)	TT-401	2007	Madhya Pradesh, Maharasthra, Gujarat, Chhattisgarh	High yielding, tolerant to pod borer and pod fly damage
Cowpea Chowli/Lobhiya (Vigna unguiculata)	TRC-77-4 (Khalleshwari)	2007	Chhattisgarh (rabi)	Suitable for rice based cropping system

(b) Yes, Sir.

(c) 11 Trombay crop varieties as detailed at (a) above, have been released for commercial production and notified by Ministry of Agriculture, Government of India.

(d) Development of mutant crop varieties is a continuous process. Varients obtained by radiation induced mutation of oilseeds and pulses are being evaluated at BARC and collaborating Agricultural Universities. For dissemination of the research efforts of BARC to the farmers, effective linkages have been established with Indian Council of Agricultural Research (ICAR), State Agricultural Departments, State Agriculture Universities, National and State Seeds Corporations, NGOs, National Institutes, Krishi Vigyan Kendras, progressive farmers etc. Production of nucleus/breeder seeds is undertaken at BARC farms at Trombay and Gauribidanur, Karnataka and also in collaboration with progressive farmers and Agricultural Universities. Breeder seeds are supplied to different National and State Seeds Corporations for multiplication into foundation and certified seeds to reach farmers.