

GOVERNMENT OF INDIA  
MINISTRY OF AGRICULTURE AND FARMERS WELFARE  
DEPARTMENT OF AGRICULTURAL RESEARCH & EDUCATION

**LOK SABHA**  
**UNSTARRED QUESTION NO. 2424**  
TO BE ANSWERED ON 02/01/2018

**NEW DROUGHT RESISTANT VARIETIES OF CROPS**

2424. SHRI P. KUMAR:

Will the Minister of AGRICULTURE AND FARMERS WELFARE  
कृषि और किसान कल्याण मंत्री be pleased to state:

- (a) whether Indian Agricultural Research Institute (IARI) has recently developed and released new drought resistant varieties of crops;
- (b) if so, the details thereof;
- (c) the various steps taken by the Government to popularize these varieties among farmers; and
- (d) the further steps taken by the Government in this regard?

**A N S W E R**

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE  
कृषि और किसान कल्याण मंत्रालय में राज्य मंत्री  
**(SHRI GAJENDRA SINGH SHEKHAWAT)**

- (a) Yes, Madam. Recently, ICAR-Indian Agricultural Research Institute (IARI) has developed and released 7 drought resistant/rainfed varieties of field crops.
- (b) The details are attached as **Annexure-I**.
- (c) Breeder seeds of stress tolerant varieties are produced as per the indent received from DAC&FW and provided to the public and private seed agencies for production of foundation and certified seeds for cultivation by the farmers. Moreover, the Business Planning Unit of ICAR-IARI publicizes and promotes the varieties for their licensing to both Farmers registered for seed production as Farmer Producer Organizations or registered seed production companies.

Crop commodity Institutes of ICAR are regularly conducting nationwide Front Line Demonstrations (FLDs) of newly released varieties, on and off farm trainings, skill development programmes, improved technology demonstrations including

varieties/hybrids in pursuit of technology transfer and to create awareness amongst the farmers for adopting improved stress tolerant varieties to enhance the farm productivity and production. Besides, Kisan Melas, Farmers' Field Days, Kisan Gosthis, Scientists-farmers interfaces/ meetings on different aspects of varieties, crop production and protection technologies are organised regularly by the ICAR institutes, State Agricultural Universities (SAUs) and Krishi Vigyan Kendras (KVKs).

(d) During 2014-15 to 2016-17, total 3,50,514 quintals of breeder seed of different field crops including short duration and stress tolerant varieties were produced against indent of 3,12,498 quintals. During 2016-17, 57 quintals of wheat variety Pusa Kiran and 3.3 quintals of barley variety Pusa Sheetal were produced.

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**Drought tolerant/rainfed varieties developed by ICAR-Indian Agricultural Research Institute (IARI), New Delhi and its Regional stations during 2014-2017**

<b>S.No</b>	<b>Varieties</b>	<b>Year of release</b>	<b>Area of adoption</b>	<b>Salient features</b>
<b>Wheat</b>				
1	Pusa Kiran (HS 542)	2014	Himachal Pradesh, J&K, Uttarakhand, and North Eastern States under early sown rainfed condition	Suitable for early sown, rainfed condition; maturity 178-210 days; average yield 32.9 q/ha
2	Central Wheat HS-562	2016	Himachal Pradesh, J&K, Uttarakhand, Assam, Mizoram, Meghalaya, Manipur, Arunachal Pradesh, Tripura and Nagaland	Suitable for both rainfed and irrigated, timely sown conditions; field resistance to yellow rust, maturity duration 149-214 days Average yield 36.0 q/ha under rainfed and 52.7 q/ha under irrigated
3	Pusa Ujala (HI 1605)	2017	Maharashtra, Karnataka and Tamil Nadu	Suitable for timely sown, restricted irrigation conditions, high levels of resistance to black and brown rust diseases, rich in micronutrients like iron (43 ppm) and zinc (35 ppm), average seed yield is 30.0 q/ha
4	HD 3171	2017	Uttar Pradesh, Bihar, West Bengal and Assam	Suitable for rainfed, timely sown condition, resistance to leaf rust (LR) and leaf blight (LB)
<b>Barley</b>				
5	Pusa Sheetal (BHS 400)	2014	Himachal Pradesh, Uttarakhand, J&K and North Eastern States under timely sown rainfed conditions	Suitable for rainfed conditions, maturity duration 129-202 days; Average yield 32.7 q/ha.
<b>Pearl millet</b>				
6	Pusa Composite 701 (MP 535)	2016	Rajasthan, Gujarat, Haryana, Punjab, Madhya Pradesh, Uttar Pradesh and Delhi	Drought tolerant, resistant to downy mildew, matures in 80 days, grain yield is 23.1 q/ha and dry fodder yield is 71.0 q/ha.
<b>Lentil</b>				
7	Pusa Ageti Masoor (L 4717)	2017	Madhya Pradesh, Uttar Pradesh, Rajasthan and Chhattisgarh	Matures in 96-106 days, seed yield 12.0-13.0 q/ha. Earliness helps in escaping terminal moisture and heat stress.

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