

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

RAJYA SABHA
UNSTARRED QUESTION NO-1122
ANSWERED ON- 16/12/2022

RELEASE OF MUSTARD HYBRIDS

1122. SHRI ANEEL PRASAD HEGDE:

Will the MINISTER OF AGRICULTURE AND FARMERS WELFARE be pleased to state:

(a) whether Government has released any mustard hybrids in the country, if so, the list of such hybrids and their parental lines released so far, kind of Cytoplasmic male sterility used, area under cultivation of each hybrid, name of the registrant and their yield potential; and

(b) whether public sector institutes including State Agricultural Universities have entered into any kind of contract or Memorandum of Understanding (MoU) to share cytoplasmic male sterile lines of mustard, fertility restorer lines of mustard and/or mustard hybrids, if so, the list of the entities thereof?

ANSWER

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE

(SHRI NARENDRA SINGH TOMAR)

- (a) Yes, following ten mustard hybrids have been released by the Government in the country:
- i. NRCHB 506 developed by Indian Council of Agricultural Research - Directorate of Rapeseed Mustard Research, Bharatpur using *mori* Cytoplasmic Male Sterility (CMS) system (MJA 5 x MJR 1) with average seed yield of 20.00 q/ha and recommended for the states of Madhya Pradesh, Uttar Pradesh, Uttarakhand and Eastern Rajasthan, was released during 2009.
 - ii. Dhara Mustard Hybrid-1 (DMH-1), developed by Delhi University South Campus, New Delhi and Dhara Vegetable Oil and Foods Company Limited, National Dairy Development Board, Anand using *I-126* CMS system (5247A x 2332R) with average seed yield of 20.5 q/ha and recommended for the states of Haryana, Punjab, Jammu & Kashmir, Rajasthan (except southern part), Madhya Pradesh and Uttar Pradesh, released during 2009.
 - iii. Corel 432, released during 2010, was developed by Advanta India Limited, Bangalore using *Ogu* CMS system with average seed yield of 23.0 q/ha and recommended for the states of Rajasthan, Haryana, Punjab, Delhi, western Uttar Pradesh and northern parts of Rajasthan.
 - iv. Corel 437, released during 2011, was developed by Advanta India Limited, Bangalore using *Ogu* CMS system with average seed yield of 22.5 q/ha and recommended for the states of Uttar Pradesh, Madhya Pradesh, Uttarakhand, Chhattisgarh and Kota region of Rajasthan.

- v. Kesari Gold (31J3403), released during 2019, was developed by Bayer Bio Science Private Limited, Mumbai using *Ogu* CMS system with average seed yield of 17.92 q/ha and recommended for the state of West Bengal.
- vi. Kesari 5111 (PCJ03-401), released during 2019, was developed by Bayer Bio Science Private Limited, Mumbai using *Ogu* CMS system with average seed yield of 14.81 q/ha and recommended for the states of West Bengal, Uttar Pradesh, Madhya Pradesh, Uttarakhand and eastern Rajasthan.
- vii. Bayer Mustard 5222, released during 2019, was developed by Bayer Bio Science Private Limited, Mumbai using *Ogu* CMS system with average seed yield of 16.78 q/ha and recommended for the state of West Bengal.
- viii. RCH-1 released during 2021, was developed by Punjab Agricultural University, Ludhiana using *Ogu* CMS system (CMS-ZM 20 X OCRE-4NR) with average seed yield of 26.66 q/ha and recommended for the states of Rajasthan, Punjab, Haryana, Delhi, western Uttar Pradesh, Plains of Jammu & Kashmir and Himachal Pradesh.
- ix. PHR 126, released during 2021, was developed by Punjab Agricultural University, Ludhiana using *Ogu* CMS system with average seed yield of 22.7 q/ha and recommended for the state of Punjab.
- x. SVJH-108, released during 2021, was developed by Shakti Vardhak Hybrid Seeds Private Limited, Hisar using *Ogu* CMS system with average seed yield of 24.0 q/ha and recommended for the state of Haryana.

(b) The four institutes viz., ICAR-Directorate of Rapeseed Mustard Research, Bharatpur (Rajasthan); ICAR-Indian Agricultural Research Institute, New Delhi; Punjab Agricultural University, Ludhiana (Punjab) and Chaudhary Charan Singh Haryana Agricultural University, Hisar (Haryana) are working on hybrid development in mustard using four CMS systems. All the CMS and restorer lines are shared freely with public and private sectors by these institutes for use in hybrid development.
