

Press Note

Indian Agricultural Research Institute has been the paragon of excellence in agricultural research and education in India. The varieties and technologies developed by IARI have been instrumental in enhancing crop productivity as well as the income of farmers manifold besides attaining national food security. It has also provided leadership to the National Agricultural Research System for advancements in agricultural research, education and extension.

IARI has also contributed for human resource development in the under developed countries like by extending mentorship in establishing a university in Afghanistan and an Advanced Centre for Agricultural Research and Education in Myanmar.

Recently, the Hon'ble president of India dedicated the Advanced Centre for Agricultural Research and Education (ACARE) building and related infrastructures of laboratories and state of art equipment to the people of Myanmar. The students of Afghan Agricultural Science & technology University (ANASTU), Kandhar in Afghanistan are studying at IARI for their course work.

The population of India is estimated to reach 1.66 billion by 2050. During 2018-19 the institute released a rice variety named "Pusa Sambha 1850" for Chhattisgarh and Odisha. This is a high yielding, non-basmati medium slender grain variety with resistance to blast disease.

The institute is also credited with the release of Maize hybrid "Pusa Super Sweet Corn 1" with high sweetness and good fodder quality

Two new wheat genotypes (HI 1612 and HD 8777) developed by ICAR-IARI, Regional Station, Indore were notified by CVRC vide gazette notification number S.O. 1379(E).

In Pearl millet, the nutraceutical grain, a number of inbred having high iron (72-113ppm) and zinc content (40-55ppm) have been developed.

In chickpea, high yielding extra-large kabuli chickpea (>50g/100 seeds) genotypes having export potential, in pigeonpea, extra early and early varieties, dwarf stature and amenable to mechanical harvesting have been developed.

The identification of germplasm lines of rice and wheat with >20% higher water use efficiency (WUE) as compared to the known checks viz., Nagina 22 and C306, respectively, and QTLs for WUE.

"Pusa Aditi" grape hybrid was released by the Delhi State Variety Release Committee for its commercial cultivation in NCR region.

Two varieties viz. cherry tomato 'Pusa Cherry Tomato-1' and onion 'Pusa Sobha' have been released and notified by CVRC for cultivation under protected condition in Delhi NCR and major onion growing states of the country, respectively. Onion variety 'Pusa Sona' has been released by All India Network Project on Onion and Garlic and recommended for notification by CVRC. Ten new varieties, viz. Longmelon 'Pusa Utkarsh', round melon 'Pusa Raunak', cucumber (parthenocarpic, gynoecious) 'Pusa Seedless Cucumber-6', muskmelon 'Pusa Madhurima' & 'Pusa Sardar', brinjal 'Pusa Safed Baingan-1' & 'Pusa Hara Baingan-1', okra (resistant to YVMV) 'Pusa Bhindi-5', garden pea 'Pusa Prabal' and chenopodium 'Pusa Bathua Green' and two hybrids viz. sponge gourd 'Pusa Shrestha' and bitter melon 'Pusa Hybrid-4' have been released for cultivation in Delhi NCR region and recommended for notification.

Novel biogel based green biocontrol formulations of entomopathogenic nematode, *S. thermophilum* have been developed, employing natural hydrophilic polymer and organic acid cross-linked hydrogel. The prepared formulation exhibit shelf life of more than 4 months at 35°C.

An Integrated Farming System (IFS) Model has been developed by the Agronomy Division of IARI, for ensuring livelihood security of small and marginal farmers. This 1.0 ha area IFS model intended for generating year-round income from appropriate integration of crops, dairy, fishery, duckery, biogas plant, fruit trees and agro-forestry, provided net returns of Rs 3,78,784/ha/year with an employment generation of 628 man-days.

The soil testing tool, named Pusa Soil Test and Fertilizer Recommendation (STFR) Meter, has been improved to analyze fourteen parameters viz., pH, EC, OC, available nutrients [(derived N), P, K, S, Zn, B, Fe, Mn and Cu], gypsum requirement and lime requirement. This soil testing kit can be used for generating soil health card.

The eco-friendly wastewater treatment technology of the Centre was recently commercialized to the UP Jal Nigam for developing an eco-friendly wastewater treatment facility of 100 KLD capacity at the residential boarding school of the Jawahar Navodaya Vidyalaya at Kasiram Nagar in Uttar Pradesh and of 50 KLD capacity at the All India Women's Conference office at New Delhi.

The impact of Pusa Rudhira variety (Carrot) has been evaluated. The direct R&D cost invested in varietal development is Rs 1.85 crore at the 2014-15 price. The net returns from Pusa Rudhira was Rs1.61/- lakhs / ha.

KRISHI Portal (<http://krishi.icar.gov.in>) has been enriched through providing links of several online resources available/developed at different ICAR institutes.

An institutional mechanism for upscaling IARI Post Office Linkage Extension model has been developed with Department of Posts, Government of India. Through this model, 2.3 tonnes of IARI paddy varieties were disseminated in 46 districts of 12 states. Similarly, 2.76 tonnes of IARI wheat varieties were disseminated in 9 districts of 6 states.

To promote the direct interface of scientists with the farmers and strengthen the lab to land process, *Mera Gaon Mera Gaurav* programme is being implemented by IARI in 120 cluster comprising of more than 600 villages in NCR.

IARI has been playing a pivotal role in advancement of agricultural research, education and extension as well as enhancing farmers' prosperity. On this auspicious occasion, we assure our commitment towards realizing the objectives of the nation of ensuring food, nutrition and livelihood security through quality research, education and extension.