Mahatma Phule Krishi Vidyapeeth, Rahuri

AICRP on Irrigation Water Management

1. Year of Start : The All India Co-ordinated Project for Research on **Water Management Project**, was established at Mahatma Phule Krishi Vidyapeeth, Rahuri on **17th December, 1970** and **AICRP on Groundwater Utilization** was established on **August 1989**. Further AICRP on WMP and AICRP on GWU were merged into **AICRP on IWM** vide U.R.No. MTG-3/654/509/2015, dated **21/12/2015**

2. Contact Details :

Postal Address : Chief Scientist, AICRP on Irrigation Water Management, MPKV, Rahuri-413 722

Phone No. : 02426-243260

Email : wmp.2008@rediffmail.com / wms.mpkv@gov.in

3. Objectives/Mandates :

- Assessment of surface, ground water and waste water availability and quality at regional level and to evolve management strategies using decision support systems (DSS) for matching water supply and demand in agricultural production systems.
- Design, development and refinement of surface and pressurized irrigation system including small holders, system for enhancing water use efficiency and water productivity for different agro eco systems.
- Management of rain water for judicious use and to develop and evaluate groundwater recharge technologies for augmenting groundwater availability under different hydro-geological conditions.
- Basic studies on soil-water-plant-environment relationship under changing scenarios of irrigation water management including waste water irrigation.
- To evolve management strategies for conjunctive use of surface and ground water resources for sustainable crop production.

4. Infrastructure :

Land : 16.80 ha.

Irrigation facilities : Bore well, Farm Pond

Laboratories : Soil, Plant and Water Testing Laboratory

Advanced facilities : Drip & Sprinkler Irrigation Systems

5. Human Resource :

Technical Staff :

SN	Designation	Discipline	Remarks
1	Chief Scientist	Agronomy	Filled
2	Senior Scientist	Irrigation and Drainage Engineering	Filled
3	Senior Scientist	Soil Science	Filled
4	Scientist	Agronomy	Filled
5	Scientist	Irrigation and Drainage Engineering	Filled

	Non-Technical Staff :	**SN**	**Designation**	**No of posts**	**Remarks**
		1	Agriculture Assistant	4	Filled
		2	Senior Clerk	1	Filled
		3	Laboratory Attendant	1	Filled
6.	**Research Achievements** :	42 recommended			
7.	**Ongoing Research** :				

SN	Name of the experiment
1.	Evaluation of N, P and K fertigation applied alone and in combination for best alternative at varying irrigation levels for suru sugarcane under subsurface drip
2.	Suitability of irrigation methods and yield targeting approach through fertigation on *Preseasonal* sugarcane, in Vertisol
3.	Validation of filter technology for artificial groundwater recharge through bore well on the farms/fields
4.	Response of high density Guava plantations to drip fertigation under semi-arid condition
5.	Effect of partial root zone drying cycle and drip irrigation levels on yield, Quality and input use efficiency in processing Tomato (*Lycopersicon esculentum)*
6.	Estimation of water requirement and development of crop coefficients of fodder maize through lysimetric technique (Collaborative Research project: AICRP on IWM and Dept. of IDE)
7.	Estimation of water requirement and development of crop coefficients of sunflower through lysimetric technique (Collaborative Research project: AICRP on IWM and Dept. of IDE)
8.	Conjunctive use planning of surface and groundwater in Musalwadi minor irrigation project under Mula Irrigation Project
9.	Development of Soil and Water quality management strategies under special reference to GIS and remote sensing in minor of Mula right bank canal command area
10.	Effect of irrigation and fertilizer levels along with multinutrient fertilizer for enhancing input use efficiency, growth, yield and quality in Suru sugarcane in medium black soils of Maharashtra
11.	Evaluation of potassium requirement through multinutrient fertilizer for enhancement of quality and yield of cotton under irrigated situation of medium black soils of Maharashtra
12.	Groundwater recharge estimation using different methods in semi-arid region of Maharashtra
13.	Effect of graded potassium and secondary nutrients for enhancement of input use efficiency, growth, yield and quality of Adsali sugarcane in medium black soils of Maharashtra
14.	Application of multinutrient fertilizer integration with graded levels of fertilizer for reddening management, enhancing the fibre quality and yield in rainfed cotton under medium black soils of Maharashtra