



## Mahatma Phule Krishi Vidyapeeth, Rahuri

**148, NARP, Agricultural Research Station,  
Vadgaon Maval**

1.	<b>Year of Start</b>	:	1940																												
2.	<b>Contact Details</b>	:																													
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3.	<b>Objectives/Mandates</b>	:	<ul style="list-style-type: none"><li>To evolve improved, high yielding rice strains suitable for the track having resistance to pests and diseases.</li><li>To conduct the agronomy trials for recommending the package of practices for high yielding varieties.</li><li>To produce breeder, foundation and truthful seed of the improved rice varieties to meet the demand of Government agencies, taluka seed farms and farmers.</li><li>To give new developed agro technologies to the farmers to boost the yield of rice.</li><li>Extension activities of research to concerned agencies/farmers etc.</li></ul>																												
4.	<b>Infrastructure</b>	:																													
	<b>Land</b>	:	18.22 ha.																												
	<b>Irrigation facilities</b>	:	Well - 2, Farmpond - 1																												
5.	<b>Human Resource</b>	:																													
	<b>Technical Staff</b>	:	<table><thead><tr><th>SN</th><th>Designation</th><th>Discipline</th><th>Remarks</th></tr></thead><tbody><tr><td>1</td><td>Officer In-charge</td><td>Agronomy</td><td>Filled</td></tr><tr><td>2</td><td>Assistant Professor of Agronomy</td><td>Agronomy</td><td>Vacant</td></tr><tr><td>3.</td><td>Assistant Professor of Botany</td><td>Botany</td><td>Filled</td></tr><tr><td>4.</td><td>Junior Research Assistant</td><td>Botany</td><td>Filled</td></tr></tbody></table>	SN	Designation	Discipline	Remarks	1	Officer In-charge	Agronomy	Filled	2	Assistant Professor of Agronomy	Agronomy	Vacant	3.	Assistant Professor of Botany	Botany	Filled	4.	Junior Research Assistant	Botany	Filled								
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	<b>Non-Technical Staff</b>	:	<table><thead><tr><th>SN</th><th>Designation</th><th>No of posts</th><th>Remarks</th></tr></thead><tbody><tr><td>1.</td><td>Agril Asstt</td><td>3</td><td>Filled - 2 Vacant - 1</td></tr><tr><td>2.</td><td>Sr. Clerk</td><td>1</td><td>Filled - 1</td></tr><tr><td>3.</td><td>Counter</td><td>2</td><td>Filled - 1 Pooled - 1</td></tr><tr><td>4.</td><td>Peon</td><td>1</td><td>Vacant -1</td></tr><tr><td>5.</td><td>Watchman</td><td>1</td><td>Vacant -1</td></tr><tr><td>6.</td><td>Mazdoor</td><td>11</td><td>Filled - 5 Vacant - 6</td></tr></tbody></table>	SN	Designation	No of posts	Remarks	1.	Agril Asstt	3	Filled - 2 Vacant - 1	2.	Sr. Clerk	1	Filled - 1	3.	Counter	2	Filled - 1 Pooled - 1	4.	Peon	1	Vacant -1	5.	Watchman	1	Vacant -1	6.	Mazdoor	11	Filled - 5 Vacant - 6
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6.	Research Achievements :	
	Varieties :	05
	Recommendations :	22
7.	Ongoing Research :	1.

**Ongoing Research** (only list of ongoing research experiments)

## **I. Rice Breeding**

### **1) Short Term Programme**

- A) AICRP Trials-*Kharif 2017* - 2
- B) Maharashtra State Trials- *Kharif 2017* - 10
- C) Station Variety Trials- *Kharif 2017* - 5
- D) Product Testing Trials -*Kharif 2017* (64 Entries including checks) -

### **2) Long Term Programme**

- A) **Collection, maintenance and evaluation of germplasm lines - 207 Genotypes**
- B) **Varietal Development Programme** - Development of high yielding, early, long /Medium/Small slender and scented variety of paddy with diseases & pest resistance.
- C) **Generation of Breeding Material - F<sub>1</sub> - 25, F<sub>2</sub> - 6, F<sub>3</sub> - 12, F<sub>4</sub> - 12, F<sub>5</sub> - 18, F<sub>6</sub> - 8 and F<sub>7</sub> - 12**
- D) **CMS line Development Programme** - Development of long slender, CMS lines with resistance to pest and diseases.
- E) **Restorer line Development Programme** - Development of long slender, scented restorer lines with resistance to pest and diseases.
- F) **Maintenance of Male Sterile lines** - IR-58025 A / B
- G) **Mutation Breeding** - Development of early, dwarf, scented strains of Indrayani variety and development of dwarf, non-lodging, scented and high yielded stains of Ambemohar-157 variety.
- H) **Population Development programme** - A cross between blast susceptible paddy variety Indrayani and a resistant line KJT-2 is effected to study the genetics of blast resistance in rice.

## **II. Rice Agronomy**

### **1) State Programme**

- a) **Climate change** -Studies on the effect of transplanting time of different paddy varieties in relation to climate change
- b) **Integrated nutrient management**- Effect of foliar application of nutrients on growth yield and quality of paddy.
- c) **Organic farming** - To study the effect of substitution of various on-farm organic resources in paddy.
- d) **Weed management** - Weed management in nursery, drilled and transplanted paddy.
- e) **Production technology**- To compare the performance different varieties of paddy under different levels of fertilizers during summer season.
- f) **Cropping sequence**- Diversification of rice based cropping system with high value crops under receding soil moisture in paddy field harvesting after November.

- g) Direct seeded rice** - Performance of different direct seeded rice methods in sub mountane zone.
- h) Mechanization** - Performance of tractor operated seed drill in nursery of transplanted rice and DSR.

## **2) AICRP Programme**

### **a) Integrated weed management**

- i. Long term evaluation of different weed management practices for enhancement of the productivity in different DSR methods.
- ii. Evaluation of cultivars for weed competitiveness under puddled direct wet seeded rice.
- iii. Evaluation of cultivars for weed competitiveness under aerobic rice.

### **b) Rice based cropping system**

- i. Conservation agriculture / system based management practices in rice and rice based cropping system.
- ii. Analysis of long term meteorology data (temp and rainfall) for identifying the reasons for yield reduction.