

The implementation of different research projects under Rajiv Gandhi Science and Technology Commission (RGSTC), Govt. of Maharashtra at Mahatma Phule Krishi Vidyapeeth, Rahuri.

*Implementation for the period 2022-23 to 2023-24*



**MAHATMA PHULE KRISHI VIDYAPEETH**  
**RAHURI, DISTRICT : AHMEDNAGAR**  
**(MAHARASHTRA)**

Univ. Reso. No. MTG- 3 (713) /363/ of 2023

Date: 09/03/2023

**Read :**

1. No. RGSTC/File-2021/MPKV/CR-41 dated 12 March, 2021
2. No. RGSTC/File-2021/MPKV/CR-41/36 dated 31 January, 2022
3. No. RGSTC/File-2021/MPKV/CR-41/58 dated 09 February, 2022
4. UR No. MTG-3 (713)/213/2022 dated 29/06/2022

The Rajiv Gandhi Science and Technology Commission (RGSTC) scheme on "Assistance for S & T Applications Through University System" has been sanctioned to Mahatma Phule Krishi Vidyapeeth, Rahuri for implementation during 2022-23 by Rajiv Gandhi Science and Technology Commission (RGSTC), Govt. of Maharashtra, Mumbai.

Accordingly, Mahatma Phule Krishi Vidyapeeth, Rahuri signed an MoU with Rajiv Gandhi Science and Technology Commission (RGSTC) for implementation of the Scheme "Assistance for Science and Technology Applications through University System". Accordingly, the project has started functioning at Mahatma Phule Krishi Vidyapeeth, Rahuri as per the sanctioned order issued by RGSTC, Mumbai vide No. RGSTC/File-2021/MPKV/CR-41/58, dated 09 February, 2022 and UR No. MTG-3 (713)/213/2022 dated 29/06/2022. The RGSTC, Govt. of Maharashtra, Mumbai has sanctioned and released an amount of Rs. 50,00,000/- (Rs. Fifty Lakhs only) to Mahatma Phule Krishi Vidyapeeth, Rahuri for implementation of the said scheme.

As per the guidelines and format provided by RGSTC, Mumbai the detailed project proposals were invited from the interested faculties/scientists working in the constituent colleges and/or research stations under MPKV, Rahuri. The proposals were scrutinized and approved by the committee of peers held on 4.4.2022. Further, the detailed project proposals were presented before the Project Appraisal Committee (PAC) for final approval. The Project Appraisal Committee approved the detailed nine projects proposal to be implemented under RGSTC Scheme.

**RESOLUTION**

On approval accorded by Rajiv Gandhi Science and Technology Commission (RGSTC), Govt. of Maharashtra, Mumbai vide letter referred at Sr. No. 1 and UR No. MTG-3 (713)/213/2022 dated 29/06/2022 the RGSTC Scheme on "Assistance for Science and Technology Applications Through University System" has started functioning at Mahatma Phule Krishi Vidyapeeth, Rahuri. As per the Resolution passed by the Hon. Executive

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Council, MPKV, Rahuri in its 336<sup>th</sup> meeting held on 03/10/2022 vide Resolution No. 02/336, the Hon. Vice Chancellor, MPKV, Rahuri is pleased to accord sanction for the implementation of following different research projects under RGSTC Scheme on "Assistance for Science and Technology Applications through University System" at Mahatma Phule Krishi Vidyapeeth, Rahuriat University level.

1. Spectral response-based breeding in different crops for screening of genotypes for biotic and abiotic stresses
2. Development compost Enrichment Technology
3. Demonstration, training and evaluation of MPKV developed IoT based irrigation management technologies.
4. Design, development and performance analysis of solar powered agricultural machine for small farmer.
5. Active edible coatings to improve storability of a fresh agricultural products
6. Biochemical studies for extending shelf life of sugarcane juice with different packaging material
7. Evaluation of cane productivity, sugar recovery, SOC-sequestration and soil health under conservative sugarcane ratoon management system in semi-arid tropical environments of different sugar recovery zones of Maharashtra.
8. Response of animals under change in climatic condition and strategies for better adaptation and mitigation for sustainable livestock production.
9. Development of methodology for irrigation water management for sugarcane crop using ground/ drone/ satellite based spectral data.

The research project wise sanctioned grants are given in Annexure-A. The details of respective project Principal Investigators, Co-Principal Investigators, Technical, Administrative, Financial and Overall Control, DDO & PAO are given in Annexure-B. The qualification and emolument details for appointment of contractual manpower are given in Annexure-C.

This resolution is issued in concurrence of the Comptroller vide his un-official reference No. Cr. 289 VC, dated: 13/02/2023.

*Sd/-*

**Registrar  
MPKV, Rahuri**

**F.W.Cs.** for information and necessary action to

- 1) The Director (Research), MCAER.132/B. Bhamburda, Bhosalenagar, Pune 411 007
- 2) The Director of Research, MPKV, Rahuri.
- 3) The Director of Extension Education, MPKV, Rahuri
- 4) The Dean, Faculty of Agriculture & Director of Instruction, MPKV, Rahuri
- 5) The Associate Dean (All), MPKV, Rahuri
- 6) The Associate Director of Research, MPKV, Rahuri
- 7) The Head Departments (All), MPKV, Rahuri
- 8) The Comptroller, MPKV, Rahuri
- 9) The Planning Officer, MPKV, Rahuri
- 10) The Deputy Registrar (Admn/ACD), MPKV, Rahuri
- 11) The Asstt. Comptroller (II/III/IV)/PAO, MPKV, Rahuri
- 12) The PA to Hon. Vice Chancellor, MPKV, Rahuri
- 13) All Principal Investigators.

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**Deputy Registrar (Admin.)  
MPKV, Rahur**

**Annexure – A**  
**Title and sanctioned grants of the projects approved under RGSTC Scheme at**  
**University level**

Sr. No.	Title of Project	Sanctioned Grants for the years 2022-23 and 2023-24
1.	Spectral response-based breeding in different crops for screening of genotypes for biotic and abiotic stresses	5.00
2.	Development compost Enrichment Technology	6.50
3.	Demonstration, training and evaluation of MPKV developed IoT based irrigation management technologies.	5.00
4.	Design, development and performance analysis of solar powered agricultural machine for small farmer.	5.00
5.	Active edible coatings to improve storability of a fresh agricultural products	5.00
6.	Biochemical studies for extending shelf life of sugarcane juice with different packaging material.	5.00
7.	Evaluation of cane productivity, sugar recovery, SOC-sequestration and soil health under conservative sugarcane ratoon management system in semi-arid tropical environments of different sugar recovery zones of Maharashtra.	8.00
8.	Response of animals under change in climatic condition and strategies for better adaptation and mitigation for sustainable livestock production.	5.00
9.	Development of methodology for irrigation water management for sugarcane crop using ground/ drone/ satellite based spectral data.	5.50

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**Deputy Registrar (Admin.)**  
**MPKV, Rahur**






## Annexure - B Implementation details

Sr. No.	Title of the project	Name/Designation/Email/mobile of PI	Name/Designation of Co-PI	Technical control (Name & Designation/email)	Administrative & Financial control (Designation/Email)	Drawing & Disbursement Officer	Pay & Account Officer	Overall Control
1.	Spectral response-based breeding in different crops for screening of genotypes for biotic and abiotic stresses	Dr. P. L. Kulwal, Professor (CAS), Biotechnology Centre, MPKV, Rahuri, Mobile No.: 09404113740 Email: pawankulwal@gmail.com	Dr. S. A. Kadam Associate Professor (CAS), Deptt. of Agril. Engineering, MPKV, Rahuri Mobile No. 9689856642 Email: sunil21075@gmail.com	Head, Department of Agril. Botany, MPKV, Rahuri	Officer Incharge, State Level Biotechnology Centre, MPKV, Rahuri	DDO & Officer Incharge, State Level Biotechnology Centre, MPKV, Rahuri	Pay and Account Officer, MPKV, Rahuri	Director of Research, MPKV, Rahuri
2.	Development of compost Enrichment Technology	Dr. A. B. Jadhav, Associate Professor (CAS), Soil Science and Agricultural Chemistry, College of Agriculture, Pune. Mobile No. 8275376067 Email: abjadhav1234@rediffmail.com	Dr. A. B. Gosavi, Associate Professor, Soil Science & Agril. Chemistry, College of Agril. Pune Dr. A. V. Patil, Assistant Professor, Soil Science & Agril. Chemistry, College of Agril. Pune Dr. C. T. Kumbhar, Assistant Professor, Agril. Microbiology, College of Agril. Pune	Head, Deptt. of Soil Science & Agril. Chemistry, College of Agril. Pune	Associate Dean, College of Agriculture, Pune	Assistant Comptroller, College of Agriculture, Pune	Pay and Accounts Officer, MPKV Pune Region, College of Agriculture, Pune	Director of Research, MPKV, Rahuri
3.	Demonstration, training and evaluation of MPKV developed IoT based irrigation management technologies.	Dr. S. A. Kadam Associate Professor (CAS), Deptt. of Agril. Engineering, MPKV, Rahuri Mobile No. 9689856642 Email: sunil21075@gmail.com	Dr. S. D. Gorantwar, Head, Deptt. of Agril. Engineering, MPKV, Rahuri Dr. M. G. Shinde, Professor of SWCE, CAAST-CSA W M, Deptt. of Agril. Engg., MPKV, Rahuri	Head, Deptt. of Agril. Engineering, MPKV, Rahuri	Head, Deptt. of Agril. Engineering, MPKV, Rahuri	DDO & Co-Principal Investigator, CAAST-CSA W M, Deptt. of Agril. Engineering, MPKV, Rahuri	Pay and Account Officer, MPKV, Rahuri	Director of Research, MPKV, Rahuri



4.	Design, development and performance analysis of solar powered agricultural machine for small farmer.	Dr. A. A. Walunj, Assistant Professor of Mechanical Engg., Dept. of Farm Machinery & Power Engg., Dr. ASCAET, MPKV, Rahuri Mobile No. 9403188542 Email: aawalunj@gmail.com	Dr. P. G. Popale, Assistant Professor of IDE, AICRP on IWM, MPKV, Rahuri Dr. S. M. Nalawade, Professor & Head, Head, Deptt. of Farm Machinery & Power Engg., Dr. ASCAET, MPKV, Rahuri	Head, Deptt. of Farm Machinery & Power Engg., Dr. ASCAET, MPKV, Rahuri	Associate Dean, Dr. ASCAET, MPKV, Rahuri	Assistant Registrar, Dr. ASCAET, MPKV, Rahuri	Pay and Account Officer, MPKV, Rahuri	Director of Research, MPKV, Rahuri
5.	Active edible coatings to improve storability of a fresh agricultural products	Dr. S. S. Dhumal Professor of Horticulture (I/C), RCSM College of Agriculture, Kolhapur Mobile No. 7588695507 / 9766534660 Email: sangram1326@hotmail.com, Sangram1897@gmail.com	Dr. Patange Dnyaneshwar Devrao, Associate Professor, Animal Husbandry and Dairy Science, RCSM College of Agriculture, Kolhapur Dr. Ravindra Dadabhau Pawar, Assistant Professor of Horticulture, RCSM College of Agriculture, Kolhapur Smt. Sima Amrut Sarvade, Assistant Professor of Horticulture, RCSM College of Agriculture, Kolhapur Dr. V. P. Kad, Associate Professor of APE, Dr. ASCAET, MPKV, Rahuri Dr. B. M. Bhalerao	Head, Deptt. of Horticulture, RCSM College of Agriculture, Kolhapur	Associate Dean, RCSM College of Agriculture, Kolhapur	Assistant Comptroller, RCSM College of Agriculture, Kolhapur	Pay and Accounts Officer, RCSM College of Agriculture, Kolhapur	Director of Research, MPKV, Rahuri
6.	Biochemical studies for extending shelf life of sugarcane juice with different	Dr. A. A. Kale, Professor and Head, Department of Biochemistry, MPKV, Rahuri Mobile No. 7588604084 Email: 	Dr. V. P. Kad, Associate Professor of APE, Dr. ASCAET, MPKV, Rahuri Dr. B. M. Bhalerao	Head, Deptt. of Biochemistry, PGI, MPKV, Rahuri	Associate Dean, PGI, MPKV, Rahuri	Assistant Registrar, Post Graduate Institute, MPKV, Rahuri	Pay and Account Officer, MPKV, Rahuri	Director of Research, MPKV, Rahuri



	packaging material.	hodbiochem84.mpkvrahuri@gmail.com	Assistant Professor, Deptt. of Biochemistry, PGI, MPKV, Rahuri Ms. S. G. Mohite, Senior Research Assistant, Deptt. of Biochemistry, PGI, MPKV, Rahuri Dr. D. D. Sawale, Assistant Professor, Soil Science & Agril. Chemistry, College of Agriculture, Pune Shri. S. U. Deshmukh, Senior Research Assistant, Soil Science & Agril. Chemistry, College of Agriculture, Pune Dr. M. C. Manna, Head, Deptt. of Soil Science, Dr. Rajendra Prasad Central Agricultural University, Pusa, Bhubihar Dr. Anand B. Rao, Professor & Head, Centre for Technology Alternatives for Rural Areas (CTARA), IIT, Bombay	Head, Deptt. of Soil Science and Agril. Chemistry, College of Agriculture, Pune	Associate Dean, College of Agriculture, Pune	Assistant Comptroller, College of Agriculture, Pune	Pay and Accounts Officer, MPKV Pune Region, College of Agriculture, Pune	Director of Research, MPKV, Rahuri
7.	Evaluation of cane productivity, sugar recovery, SOC-sequestration and soil health under conservative sugarcane ratoon management system in semi-arid tropical environments of different sugar recovery zones of Maharashtra.	Dr. D. H. Phalke, Assistant Professor of Soil Science & Agril. Chemistry, College of Agriculture, Pune Mobile No. 9890475464/ 9420486650 Email.: dhphalke@gmail.com	Dr. D. H. Phalke, Assistant Professor of Soil Science & Agril. Chemistry, College of Agriculture, Pune Mobile No. 9890475464/ 9420486650 Email.: dhphalke@gmail.com	Head, Deptt. of Soil Science and Agril. Chemistry, College of Agriculture, Pune	Associate Dean, College of Agriculture, Pune	Assistant Comptroller, College of Agriculture, Pune	Pay and Accounts Officer, MPKV Pune Region, College of Agriculture, Pune	Director of Research, MPKV, Rahuri
8.	Response of animals under change in climatic condition and strategies for better.	Dr. S. H. Mane, Assistant Professor of Animal Husbandry and Dairy Science, College of Agriculture, Pune Mobile No. 9881721022 Email: asdsmpkv@gmail.com	Dr. S. H. Mane, Assistant Professor of Animal Husbandry and Dairy Science, College of Agriculture, Pune Mobile No. 9881721022 Email: asdsmpkv@gmail.com	Head, Deptt. of Animal Husbandry and Dairy Science, College of Agriculture, Pune	Associate Dean, College of Agriculture, Pune	Assistant Comptroller, College of Agriculture, Pune	Pay and Accounts Officer, MPKV Pune Region, College of Agriculture, Pune	Director of Research, MPKV, Rahuri

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**Annexure – C**  
**Contractual Staff**  
**Educational qualifications and experience for Skilled Worker contractual positions**

Sr. No.	Project Title	Name of the Post	No. of Posts	Qualifications	Emoluments (Rs.)
1.	Spectral response-based breeding in different crops for screening of genotypes for biotic and abiotic stresses.	Field Worker	01	<b>Essential Qualification:</b> Diploma in Agriculture or allied discipline/ undergraduate degree in Agriculture or allied discipline. <b>Desirable:</b> Experience in taking observations using hyper spectral imaging instrument, analysis of data; conducting field trial; computer skills	Rs. 12000/- Per Month (Fixed)
2.	Development compost Enrichment Technology.	Skilled Helper	01	<b>Essential</b> 1. 12 <sup>th</sup> Std from recognized board or Diploma in Agriculture 2. Typing: English-30wpm, Marathi-30wpm Minimum 3. MSCIT course completion certificate <b>Desirable</b> Project work experience of minimum two years	Rs. 16,000/- Per Month (Fixed)
3.	Demonstration, training and evaluation of MPKV developed IoT based irrigation management technologies.	Skilled Worker	01	<b>Essential:</b> 1. Any Graduate 2. Typing- Marathi 30, English 40 or more 3. MSCIT 4. At least two years of experience in University/State/Central Govt. managed projects/schemes.	Rs. 12,000/- Per Month (Fixed)

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		Nil			
4.	Design, development and performance analysis of solar powered agricultural machine for small farmer.	Lab Attendant/Agril. Assistant	01	<b>Essential Qualification and eligibility criteria:</b> Minimum Diploma in Agriculture with minimum 60 percent marks <b>Or</b> 12 <sup>th</sup> Class passed from Science stream along with basic knowledge of computer operation (Successfully passed MS-CIT Exam) <b>Desirable:</b> Knowledge of computer (MS-Office)	Rs. 13,500/- Per Month (Fixed)
5.	Active edible coatings to improve storability of a fresh agricultural products.				
6.	Biochemical studies for extending shelf life of sugarcane juice with different packaging material.	Skilled Helper	01	<b>Essential Qualification and eligibility criteria:</b> Minimum Diploma/Degree in Agriculture <b>Desirable:</b> 1. Experience in Biochemical Analysis related work in laboratory. 2. Knowledge of typing Marathi 30 WPM and English 40 WPM	Rs. 10,000/- Per Month (Fixed)
7.	Evaluation of cane productivity, sugar recovery, SOC- sequestration and soil health under conservative sugarcane ratoon management system in semi-arid tropical environments of different sugar recovery zones of Maharashtra.	Skilled Helper	01	<b>Essential</b> 1. 12 <sup>th</sup> Std from recognized board or Diploma in Agriculture 2. Typing: English-30 wpm, Marathi-30 wpm Minimum 3. MSCIT course completion certificate <b>Desirable</b> Project work experience of minimum two years	Rs. 16,000/- Per Month (Fixed)



8.	Response of animals under change in climatic condition and strategies for better adaptation and mitigation for sustainable livestock production.	Skilled Helper (field / Lab Asstt.)	01	<b>Essential:</b> Diploma of LSS or Agril. Diploma or Degree in Agril. Science or Degree in Animal Husbandry <b>Desirable qualification:</b> Two years experience of field work related to the post mentioned in advertisement.	Rs. 16,000/- Per Month (Fixed)
9.	Development of methodology for irrigation water management for sugarcane crop using ground/ drone/ satellite based spectral data.	Field Assistant/Project Assistant	01	<b>Essential</b> 1. Agriculture Diploma/12 <sup>th</sup> Std from recognized board with 2-year experience / B. Tech. Agril. Engg 2. Typing: English-30wpm, Marathi-30wpm Minimum 3. MSCIT course completion certificate <b>Desirable</b> Project work experience of minimum two years 1. Preference will be given to candidates having experience of working in University/state/central Govt. managed projects/schemes 2. The Preference will be given to candidates with B. Tech (Agricultural Engineering) degree	Rs.12000/- Per month (Fixed)

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**Deputy Registrar (Admin.)**  
MPKV, Rahur

