

**PROCEEDINGS OF THE 35th SCIENTISTS' MEET ON RICE HELD ON 10. 05.2016
AT UNIVERSITY SEMINAR HALL, TNAU, COIMBATORE**

The 35th Crop scientists' Meet 2016 was held on 10.05.2016 under the chairmanship of the Registrar, TNAU at Coimbatore. The Director of Research, TNAU, Coimbatore and all the technical directors were present. The Director, TRRI, Aduthurai had given the introductory remarks and lead scientist have presented the action taken on the Recommendations of 34th Crop Scientist Meet. Based on the discussions in the crop scientist meet, the following recommendations and action plans were emanated for adoption. The discipline wise concurrent sessions on crop improvement, management and protection was held under the chairmanship of the concerned technical directors on 9th May 2016. The highlights of the research achievements and action taken on the recommendations of the previous meet in the discipline of crop improvement, crop management and crop protection was presented by the respective lead scientists. The action plan for the year 2016-17 with respect to the above three discipline was presented by the Directors of CPBG, CMS and CPPS respectively. The meet ended with the critical remarks and vote of thanks from Director of Research, TNAU, Coimbatore.

Proceedings of the 52nd Oilseeds Scientists' Meet are in the following order.

1. Remarks on the ongoing University Research projects
2. Decision made on the entries for Variety Release/ART/MLT from breeders
3. Decision made on OFT evaluation for technologies from Crop Management and Crop protection Scientists
4. Remarks made by the Vice-Chancellor
5. Action Plan for 2016-2019: Crop Improvement, Crop Management and Crop Protection

1. Remarks on the ongoing University Research projects

Plant Breeding and Genetics

S. No.	URP Details	Remarks
1	CPBG/ADT/PBG/RAC/2013/007 Generation of extra early rice breeding lines (80-90 days) suitable for water limited conditions Dr. R. Suresh June, 2013- May, 2016	A total of 812 (103+709) single plants were selected from 22 F ₂ populations. Is it possible to maintain this many F ₃ families along with other segregating materials are being already under selection?
2	CPBG/ADT/PBG/RAC/2014/008 Development of high yielding long duration (>140 days) rice varieties with lodging tolerance suitable for samba season Dr. R. Suresh August 2014 – July 2017	How 30 plants were selected from the F ₁ s of five crosses? These selections were presumed as true F ₁ s? Number of single plants selected increases with advancement in generation i.e from F ₂ to F ₄ . What criteria were followed?
3	CPBG/ADT/PBG/RIC/2014/009	Already a detailed analysis of rice lines

	<p>Evolving strong culm short duration rice variety/culture with high yield and acceptable grain quality</p> <p>Dr.R.Pushpa April 2014 - March 2017</p>	<p>for their high Fe and Zn content was made at the Paddy Breeding Station, Coimbatore.</p>
4	<p>CPBG/ADT/PBG/RIC/2014/New Exploitation of rice land races – Generation of breeding stocks for high amylose and micro nutrients</p> <p>Dr. R. Pushpa October 2014 - September 2017</p>	<p>Already a detailed analysis of rice lines for their high Fe and Zn content was made at the Paddy Breeding Station, Coimbatore. Project number to be obtained/given</p>
5	<p>CPBG/ADT/PBG/RIC/2015/New Maintenance of germplasm types in rice</p> <p>Dr. D. Sassikumar Dr. K. Iyanar Dr. L.Subha April 2015- March 2018</p>	<p>Of the available accessions how many are having passport data?. The accessions with passport data may be compiled for further characterization. The duplicates if found may be eliminated.</p>
6	<p>CPBG/ADT/PBG/RIC/2015/New Development of medium duration rice with high yield potential, preferential grain quality and resistance to BLB suitable for irrigated ecosystem of Tamil Nadu</p> <p>Dr. D. Sassikumar October 2015 - Sept 2018</p>	<p>What are the parents used in the crossing programme with specific attribute of BLB resistance to select the segregants for high yield, grain quality and resistance? Whether the cultures in the advanced stage were screened for BLB resistance?</p>
7	<p>CPBG/CBE/PBG/RIC/2011/001 Germplasm collection, evaluation and conservation in rice</p> <p>Dr. K. Amudha June 2011 – May 2016</p>	<p>Of the 2316 accessions submitted to Ramaiah Gene Bank, how many of the accessions have real passport data? The above accessions are supposed to be collections being maintained at the PBS for very long time. MLT germplasm evaluation is a separate project from IIRR. Why this component is combined in this project?</p>
8	<p>CPBG/CBE/PBG/RIC/2011/002 Development of new CMS lines with high out crossing rate in rice</p> <p>Dr. R. Saraswathi June 2011 - May 2016</p>	<p>A total of 12 CMS lines have been developed between 2012 and 2014. In what way these lines are different from one another for their stability and restorability of fertility?</p>
9	<p>CPBG/CBE/PBG/RIC/2011/003 Evolution of fine grain medium duration rice varieties resistance to blast and stem borer</p> <p>Dr. K. Amudha June 2011 – May 2016</p>	<p>What were the specific donors with higher level resistance to blast and stemborer resistance used in the crossing programme? Whether the cultures in pipeline were subjected to screening for blast and stemborer resistance? Specify the promising cultures evaluated in AICRP trials with IET number.</p>

10	<p>CPBG/CBE/PBG/RIC/2011/006 Synthesis of early maturing (105-115 days) rice varieties resistant /tolerant to BPH, leaf folder and blast Dr. P. Jeyaprakash June 2011 - May 2016</p>	<p>What is meant by evaluation of F₁s of 122 crosses and selection of 1833 single plants? What is the need for making this many number of crosses? What were the criteria used for selecting parents before making crosses?</p>
11	<p>CPBG/CBE/PBG/RIC/2012/006 Development of new TGMS lines and two line hybrids in rice Dr. R. Saraswathi January 2012 – December 2016</p>	<p>How the new thermo-sensitive genetic male sterile lines are synthesized and characterized. The project does not have any information on the above aspects. Does the fertility restoration in TGMS lines is by the restorer lines? What is the need for using the nomenclature R lines with good combining ability?</p>
12	<p>CPBG/TKM/PBG/RIC/2010/001 Evolving drought tolerant rice varieties with good grain quality suitable for upland/semidry conditions of North Eastern zone of Tamil Nadu Dr. A. Sheeba October, 2010 – September, 2015</p>	<p>What is the need for having two projects, one for upland ecosystem and aerobic ecosystem? Under both situations the major objective is for drought tolerance. The only difference between the two systems is the yield difference. Under aerobic system supplemental irrigation will be given for getting higher yield. The materials generated with drought tolerance can be evaluated under both conditions.</p>
13	<p>CPBG/TKM/PBG/RIC/2010/003 Evolving new aerobic rice varieties for water limited environments of Tamil Nadu Dr. A. Sheeba October, 2010 – September, 2015</p>	<p>The details of the exotic collections viz. EC 638068, EC 638103, EC 638115, EC 638138 and other upland rice varieties may be furnished.</p>
14	<p>CPBG/TKM/PBG/RIC/2010/005 Maintenance of germplasm and evaluation of MLT/AICRIP entries in rice Dr.S.Banumathy October, 2010 - September, 2015</p>	<p>This project does not have any information on the maintenance of germplasm at RRS, Tirur. The report has the details on nucleus and breeder seed production only.</p>
15	<p>CPBG/TKM/PBG/RIC/2011/006 Development of medium duration rice varieties with good grain quality and resistance to major pest and diseases Dr. S. Banumathy December, 2011 - November 2016</p>	<p>In what way these two projects are different from the projects being operated in other rice research stations? Since the project leader has been transferred to AC&RI, Madurai, Dr. A. Sheeba can take care of the materials under these two projects. Proposals for two projects may be sent with suitable modifications for numbering.</p>
16	<p>CPBG/TKM/PBG/RIC/2011/007 Evolution of short duration rice varieties with good grain quality and resistance to blast and Rice Tungro Disease for the North Eastern Zone of Tamil Nadu</p>	

	Dr. S. Banumathy December, 2011 - November 2016	
17	CPBG/TRY/PBG/RIC/2011/002 Evolution and evaluation of high yielding sodicity tolerant rice varieties with good grain qualities suitable for problem soils of Tamil Nadu Dr. S. K. Ganesh September 2011 - August 2016	The title is misleading. Whether the project is for evolving rice varieties for sodicity tolerance or for other soil problems. How these three projects are being demarcated for the approaches and material development?
18	CPBG/TRY/PBG/RIC/2013/004 Development of high yielding rice varieties suitable for favorable and problem soils through ideotype breeding approach Dr. T. Thirumurugan October 2013 - September 2016	Sodicity is a problem due to the accumulation of neutral soluble salts. Salinity is a problem due to the over accumulation of exchangeable sodium.
19	CPBG/TRY/PBG/RIC/2013/005 Development of salt tolerant high yielding short duration fine grain rice variety Dr. S. Geetha April 2013 - March 2016	
20	CPBG/MDU/PBG/RIC/2015/New Induced mutagenesis using gamma rays and EMS for isolation of early mutants in rice BPT 2231 Dr. G. Anand November 2015 - October 2018	BPT 2231, popularly known Akshaya has been released as replacement for BPT 5204. The same approach was followed and an article was published in the Journal of Rice Research 2014, Vol. 7 No. 1 & 2 . Suitability of this culture for Tamil Nadu farmers need to be evaluated. Project number should be obtained.
21	CPBG/MDU/PBG/RIC/2015/New Evolution of high yielding fine grain quality medium duration rice variety suitable for PeriyarVaigai River Project Area Dr. A. Ramalingam April 2015 - March 2018	Specific work plan has to be furnished in the project proposal and project number should be obtained.
22	CPBG/MDU/PBG/RIC/2015/New Development of high yielding fine grain short duration rice variety suitable for PeriyarVaigai River Project area Dr. N. Aananthi April 2015 - March 2018	Only the advanced materials already available are being evaluated. Specific work plan has to be furnished in the project proposal and project number should be obtained.
23	CPBG/MDU/PBG/RIC/2015/New Evolution of high yielding extra-early rice variety for rainfed/tank-fed areas of Tamilnadu Dr. P. Arunachalam April 2015 - March 2018	Only the advanced materials already available are being evaluated. Specific work plan has to be furnished in the project proposal and project number should be obtained.

24	DRES/ASD/PBG/011/011 Evolving high yielding medium duration rice variety Dr. S. Arumugachamy June 2011 - May 2016	The project is towards evolving bold and slender grain medium duration varieties. Focus should be made to have an alternative to ASD 16.
25	CPBG/ASD/PBG/RIC/2014/003 Evolution of extra early rice varieties (less than 100 days) suitable for <i>Kar</i> and late <i>Pishanam</i> seasons of Thamilabbarani tract Dr. P. Gomathinayagam June 2014 - May 2017	The scientist in charge of the project got retired. If the progress is not to the expected level, the project may be closed.
26	DRES/TPS/PBG/2013/001 Development of extra early rice varieties suited for <i>Kar</i> season in Kanyakumari district Dr. S. Saravanan April 2013 - March 2018	The segregating materials available under CPBG/ASD/PBG/RIC/2014/003 can be obtained and evaluated. Project numbering should be changed as CPBG/TPS/PBG/RIC/2013/001
27	DRES/TPS/PBG/013/002 Development of rice cultures with bold grain having superior cooking quality traits suited for Kanyakumari district Dr. S. Saravanan April 2013- March 2018	Selection parents for hybridization should be decided based on the stipulated objectives. Project numbering should be changed as CPBG/TPS/PBG/RIC/2013/002
28	CPBG/TPS/PBG/RIC/2015/New Evolving early duration rice variety suitable for <i>Kannipoo</i> season of Kanyakumari district Dr. N. Shunmugavalli December, 2015 - November, 2020	Since stemborer is a major problem research work needs to be oriented towards breeding for resistance to stemborer. Only the advanced materials already available are being evaluated. Specific work plan has to be furnished in the project proposal and project number should be obtained.
29	CPBG/TPS/PBG/RIC/2015/New Evolving long duration rice variety suitable for <i>Kumbapoo</i> season of Kanyakumari district Dr. N. Shunmugavalli December, 2015 - November, 2020	Only the advanced materials already available are being evaluated. Specific work plan has to be furnished in the project proposal and project number should be obtained.
30	CPBG/PMK/PBG/RIC/2015/004 Evolution of early/very early duration drought tolerant rice genotypes with acceptable grain and cooking quality suitable for rainfed rice ecosystem Dr. S. Muthuramu September, 2015 – August, 2020	Giving culture number with prefix PM should be avoided. Original names of the materials coming for evaluation should be maintained as such. Since there are very many advanced lines are being evaluated from CPMB for drought tolerance, what is the collaboration of the breeder in evaluating the materials?
31	CPBG/PMK/PBG/RIC/2015/New Evaluation-Green super rice Dr. S. Muthuramu September 2015 - August 2020	There is no need for having a separate project for the evaluation of materials received from IRRI. They can be evaluated along with other materials.

32	CPBG/GDR/PBG/RIC/2010/002 Evolution of blast resistant rice varieties for cultivation in hilly regions of Tamil Nadu Dr. S. Manonmani June 2010 - December 2015	The reporting indicates only the evaluation of materials from different sources. Is there any specific plan of work for the component on evolution?
33	CPBG/GDR/PBG/RIC/2015/New Development, evaluation and multiplication of Temperature Sensitive Genic Male Sterile (TGMS) lines suitable for Tamil Nadu Dr. S. Manonmani September 2015 - August 2020	In what way the project being operated at PBS, Coimbatore and HREC, Gudalur are different in their objectives and workplan?
34	CPBG/TNJ/PBG/RIC/2013/001 Development of early duration rice cultures suitable for direct sown paddy areas in Cauvery Delta Zone of Tamil Nadu Dr. S. Santha April 2013 - March 2018	How 27 true hybrids were fixed from 14 F ₁ s? "Prasanna was mutagenised with the objective to reduce plant height and 704 selections made in F ₂ " - Please be scientific while reporting.
35	CPBG/KKM/PBG/RIC/2014/001 Evolution of high yielding short duration rice variety (110-115 days) for <i>kar</i> and <i>pishanam</i> seasons of Thoothukudi district Dr. A. Muthuswamy June 2014 - Mar 2017	Since the scientist has been transferred the project work may be assigned to another scientist.
36	CPBG/VGD/PBG/RIC/2010/001 Evolution of rice varieties with improved grain quality Dr. M. MadhanMohan November 2010 - October 2016	There are 74 advanced cultures available from single cross viz. ADT43/Jeeragasamba. When this is possible from single cross, why the other scientists are making so many crosses? The results of marker analysis for establishing the parentage of advanced culture under ART (<i>i.e</i> ADT43/Jeergasamba) is not well presented. Needs further clarification
37	DRES/BSR/PBG/013/001 Evaluation of superior genotypes for yield and yield components in millets, pulses, oilseeds, cotton and forage crops under multi location trials. Dr. D. Kavithamani April 2013- March 2016	The project may be closed. There is no need for operating a project for the evaluation of cultures under MLT

Breeder Seed Production

S. No.	URP Details	Remarks
1	CPBG/ADT/PBG/RIC/2012/003 Maintenance breeding of short duration rice varieties Dr. P.Shanthi	1. hy not the nucleus seeds and breeder seeds are produced by the same

	April 2012 - March 2015	breeder? What is the need for asking a breeder working in pulses is asked to look after the nucleus seed production in rice?
2	CPBG/ADT/PBG/RIC/2012/005 Nucleus seed production of long and medium duration rice varieties K. Iyanar April 2014 - March 2017	
3	CPBG/CBE/PBG/RIC/2012/005 Maintenance breeding of "CO" rice varieties Dr. P. Jeyaprakash June 2011 – May 2016	
4	CPBG/ADT/PBG/RIC/2013/006 Breeder seed production of short, medium and long duration rice varieties Dr.R. Suresh October 2013 – September 2016	
5	CPBG/CBE/PBG/RIC/2012/008 Maintenance breeding and parental line seed production of released and pre- release hybrids Dr.R.Saraswathi June 2012 - May 2017	Some of the pre-released hybrids are given for commercialization through the Directorate of Agri-Business Development.
6	CPBG/CBE/PBG/RIC/2012/032 Seed production of CORH 3 hybrid and varieties in rice Dr.S. Robin June 2012 to May 2017	Check the project number.
7	CPBG/TKM/PBG/RIC/10/005 Maintenance of germplasm and evaluation of MLT/AICRP entries in rice October, 2010 - September, 2015 Dr. S.Banumathy	Why the MLT and AICRP materials should be maintained as germplasm?
8	CPBG/KKM/PBG/BSP/2014/001 Breeder seed production of rice variety ASD 16 Dr.S.Muthusamy September, 2015 – August, 2020	What is the need for this project at AC&RI, Killikulam?
9	CPBG/TPS/PBG/RIC2013/003 Maintenance breeding for breeder seed production of rice varieties released from TNAU suited for KanyakumariDist Dr. N. Shunmugavalli April 2013- March 2016	Director, CPBG is requested to see the uniform load under these seed production projects.
10	CPBG/PMK/PBG/BSP/2015/001 Nucleus and Breeder seed production of rice varieties released from ARS, Paramakudi Dr.S.Muthuramu	

	September, 2015 – August, 2020	
11	PBG/TRY/PBG/RIC/2012/003 Rice breeder seed production and distribution Dr. S. Chithra June 2012 to May 2017	
12	CPBG/TNJ/PBG/BSP/2013/001 Breeder seed Production in paddy and pulses Dr. S .Santha September, 2015 – August, 2020	
13	CPBG/VGD/PBG/BSP/2015/01 Breeder Seed Production of rice varieties Dr. S. Utharasu Dr. M. MadhanMohan April 2015 to March 2018	
14	CPBG/SGM/PBG/BSP/2014/001 Paddy breeder seed production and distribution Dr.M.Shanmuganathan October 2014 - March 2017	
15	DRES/PAI/PBG/11/002 Maintenance and production of nucleus and breeder seeds of rice and millet varieties released from RRS, Paiyur Dr.M.Dhandapani May, 2012 to May, 2017	Check the project number. The number is not changed as per the new numbering system?

Biotechnology

S. No.	URP Details	Remarks
1	CPMB/CBE/PMB/2015/001 Development of database and software tools for identifying polymorphic SSR markers in plant genomes Dr. M. Jayakanthan July 2015- July 2018	This project does not fit in the category of rice breeding. From next year onwards the reporting of this project may be taken to the group of projects under "Modern tools and Technologies"
2	CPMB/TRY/BTB/RIC/2014/001 Screening rice landraces for enhanced barrier to salt uptake through the root apoplast Dr. L. Arul, Professor Dr. T. Thirumurugan Dr. S. Nithila October 2014 - September 2017	What were the 16 landraces shortlisted for their reduced salt uptake?

Agronomy

S. No.	URP Details	Remarks
1	<p>DCM/ADT/AGR/RIC/2013/001 Studies on the feasibility of sprinkler irrigation for rice cultivation in Cauvery Delta Zone Dr. G. Senthil Kumar June 2013 to May 2016</p>	<p>The experiment may be laid out in the place where there is scarcity of water to prove the efficacy of the sprinkler irrigation in rice production based on the results obtained. The project period is over and completion report needs to be submitted.</p>
2	<p>DCM/PMK/AGR/RIC/2014/002 Yield maximization of traditional rice cultivars through management techniques Dr. S. Sakthivel September 2014 to March 2016</p>	<p>The project title is yield maximization in traditional rice cultivars by different management practices. Only one variety is involved. The management practices followed did not result in any new information. The project period is over and completion report needs to be submitted.</p>
3	<p>DCM/PAI/AGR/RIC/2015/001 PE & POE herbicide with mechanical weeding on weed management in direct (drum) seeded rice Dr. C. Sivakumar November 2015 to October 2017</p>	<p>Pyrazosulfuron ethyl and Pretilachlor are pre-emergence herbicides. Pendimethalin is being applied as pre-emergence and post emergence herbicides. Weed density under different treatments was the only parameter reported. Abbreviations should not be used in the title.</p>
4	<p>CAEK/KUM/AGR/14/003 Influence of seed rate and water regimes on weed management and production of rice under mechanised semidry rice cultivation Dr. S. VallalKannan August 2014 to July 2017</p>	<p>The major objective of the project is to manage the water shortage under semi dry rice cultivation. What is the need for brining in the seed rate as a component? Second objective is very ambiguous. Increasing the seed rate will definitely increase the plant population. Is there any need for an experiment to be conducted? The experiment does not have any clear treatment for managing the water under semidry rice cultivation</p>
5	<p>DCM/TRY/AGR/RIC/2015/001 Standardizing the agro techniques for medium duration pre- release rice cultures Dr. S. Avudaithai June 2015 To May 2017</p>	<p>Only spacing and fertilizer doses are involved in the experimental process. What are the other agro-techniques adopted to evolve the package of practices for pre-released cultures? Whether the cultures are suitable for saline soils or sodic soils?</p>
6	<p>DCM/MDU/AGR/RIC/2014/003 Aerobic rice cultivation under tankfed irrigated condition Dr. S. AnittaFanish September, 2014 to July, 2016</p>	<p>Aerobic rice cultivation includes both water and fertilizer management. In the project input component is not at all involved. The project period is over and completion report needs to be submitted.</p>

7	TRRI/TNJ/AGR/13/001 Evaluation of safe AWD and its influence on growth and yield of rice Dr. M. Nagarajan Dr. S. Porpavai June 2013 to March 2016	Project number is not changed to the new numbering system. The project is for three years. No substantial information is made available on the influence of AWD on rice cultivation. The project period is over and completion report needs to be submitted.
8	DCM/KKM/AGR/RIC/2014/002 Standardization of soil medium for production of sturdy rice seedling suitable for machine transplanting Dr.M.Hemalatha November 2014 - December 2016	What is the need for conducting field experiments (for two years) to standardise of soil medium for production of sturdy rice seedlings? The major objective of the project is to produce sturdy seedlings for machine transplanting. But the thickness of the seedling is not observed.

Crop Physiology

S. No.	URP Details	Remarks
1	DCM/ADT/CRP/RIC/2014/002 Screening of rice genotypes for salinity tolerance Dr. K. Vanitha November 2014 - October 2017	Percentage of germination was taken as the only criterion for assessing the levels of rice genotypes to salinity. Other parameters such as accumulation of the osmolyte proline, antioxidant response, and soluble sugar can also be assessed.
2	DCM/BSR/CRP/RIC/2015/001 Physiological studies in aerobic rice through drip fertigation system Dr. M. Rajavel August 2015 – July 2017	Yield and yield components are mentioned as physiological traits. The physiological parameters to be observed under aerobic rice cultivation are not at all specified.

Soil Science and Agricultural Chemistry

S. No.	URP Details	Remarks
1	NRM/ADT/SAC/RIC/2012/001 Permanent Manurial Experiment in Rice Based Cropping System Dr. C. SharmilaRahale April 2012 to March 2017	The experiment was initiated during 1992. Higher levels inputs give increased grain and straw yield. Number of treatments maintained are 13.
2	NRM/ADT/SAC/RIC/2015/002 Evolving appropriate zinc fertilization strategy for rice-rice cropping system in old Cauvery Delta Zone Dr. C. SharmilaRahale April 2015 to March 2018	ZnSO ₄ application @ 100g/cent in the nursery and root dipping in 2% ZnO gave almost 5000 kg/ha. The yield increase from absolute control is around 2000 kg/ha. Whereas other treatments. Foliar spray of 0.5% ZnSO ₄ + 1% urea at tillering and panicle initiation stage gave 5800 kg/ha. Then what is need for other treatments where in ZnSO ₄ was applied in kilograms (>25 kg/ha)? Logical interpretations of the treatment effects are required.

3	NRM/TRY/SAC/2010/001 Permanent Manurial Experiment on Rice –Pulse cropping sequence in Calcareous Sodic soil Dr. P. Balasubramaniam September 2015 to August 2020	The experiment was initiated during 2010. Integrated nutrient management gives better yield. Number of treatments maintained is four.
4	NRM/KUM/SAC/RIC/2015/001 Permanent Manurial Experiment on Rice in clay loam soil (VerticUstropept) of Thiruchirapalli under flood irrigation Dr.T.Sherene Jenita Rajammal August, 2015 to April, 2020	The experiment was initiated during 2010. Integrated nutrient management gives better yield. Number of treatments maintained is four.
5	NRM/MDU/SAC/RIC/1975/001 Permanent Manurial Experiment On Rice Dr. P.SaravanaPandian From September 1975	The experiment was initiated in 1975. Treatment details are not furnished.
6	NRM/TPS/SAC/RIC/2015/001 Direct and Residual effect of organic sources and inorganic fertilizers on rice productivity and soil properties of vertisol in the High Rainfall Zone Dr. S. Suresh Oct. 2015 to March 2018	The project is just initiated.
7	NRM/TNJ/SAC/RIC/2011/001 Nitrogen and Potassium interaction studies under aerobic rice grown in sandy loam soils of Cauvery New Delta Dr. M. Babu June 2014 to May 2016	What are the actual conditions being maintained for aerobic rice cultivation before and after initiating the experiment?
8	NRM/TNJ/SAC/RIC/2011/002 Stubble management studies under rice–rice cropping sequence Dr. M. Babu June 2014 to May 2016	The only parameter observed was yield. No other relevant parameters were observed with and without incorporation of Nitrogen, Gypsum and Lime. The project period is over and completion report needs to be submitted.
9	NRM/ASD/SAC/RIC/2015/003 Permanent Manurial trial on rice-rice cropping system in acid soils soils of Ambasamudram Dr. S.Jothimani June 2015 – May 2020	The experiment was initiated in 2015. Number of treatments maintained is four.

Agricultural Microbiology

S. No.	URP Details	Remarks
1	NRM/ADT/AGM/RIC/2014/001 Studying the role of methanotrophs for reducing the methane emission in transplanted rice ecosystem of	Five different cultures were isolated from the soil samples taken from five different locations of Aduthurai farm. Of the five cultures only one was positive

	Cauvery Delta Zone Dr. M JeyaBharathi Sep 2014 –Aug 2017	for methane monooxygenase activity. Soil samples need to be collected from different niches of wetland rice ecosystem.
2	NRM/CB/AGM/2015/004 Screening of diazotrophic <i>Clostridium</i> isolates from flooded rice ecosystem for bioinoculant development Dr.K.G.Anitha July 2015 - June 2018	Out of 38 anaerobic bacterial isolates only one was positive nitrogenase activity
3	NRM/MDU/AGM/RIC/2014/001 Manipulation of rhizosphere microbial dynamics using <i>Paenibacillus</i> spp. in SRI –rice for nitrogen fixation, growth promotion and mitigation of water stress Dr. N. O. Gopal February 2014 –January 2017	Major role of <i>Paenibacillus</i> in rice ecosystem is to be established. Why attempts were not made to collect isolates from rice ecosystem?
4	NRM/MDU/AGM/RIC/2014/002 Formulation of cyanobacterial biofilm and evaluating its impact on rhizosphere dynamics of paddy Dr. B. JeberlinPrabina March 2014 –February 2017	Studies have been conducted to exploit Cyanobacterial tripartite biofilms in rice fields. The positive attributes of different isolates need to be furnished while reporting.
5	NRM/TRY/AGM/RIC/2015/001 Development and Evaluation of stress tolerant cyanobacterial consortia to various sodicity levels in rice ecosystem Dr.K.G.Sabarinathan March 2015 –Feb 2018	Both the projects are having same objectives. What is the need for repetition of projects?
6	NRM/TKM/AGM/RIC/2013/001 Evaluation of temperature-tolerant <i>Azolla</i> strains suitable for Thiruvallur District Dr H Gopal Sep 2013 –Aug 2016	How many collections are being maintained at the Rice Research Station representing the seven agro-climatic zones of Tamil Nadu? How the cultures were screened for their high temperature tolerance and photoperiod insensitivity?

Seed Science and Technology

S. No.	URP Details	Remarks
1	DRES/BSR/SST/013/001 Standardization of seed yield maximization techniques in rice hybrid CORH 4 Dr. R. Vigneshwari December 2013 - August 2016	New numbering system should be adopted. The results of three different techniques viz, staggering of A and R lines, planting ratio and GA ₃ application are independently studied. Whether the optimum levels for each components identified are adopted together to get maximum seed production?
2	SC/CBE/SST/2013/005 Development of seed longevity model	<i>Seed longevity the status of seed viability after dry storage. Moreover seed</i>

	to predict the storability in rice varieties Dr. C. Menaka November 2013 to October 2016	<i>longevity can be influenced by seed dormancy. Whether varieties identified for this study are assessed for their seed dormancy? What are the parameters going to be used for developing the seed longevity model? What are the options available for validating the model to be developed?</i>
3	SC/CBE/SST/RIC/2014/001 Evaluation of anatomical and biochemical causes for seed deterioration in rice genotypes and steps to mitigate the rate of deterioration Dr. R. Umarani Dr. K. Raja Dr. T. Evera Dr. N. Punithavathi	Anatomical and biochemical causes or changes for seed deterioration? Anatomical and biochemical changes can happen in seeds due to various causes on the actual anatomical and biochemical status of normal seed. Changes were already established without identifying the causes. How the present experiment will facilitate to identify the causes and subsequent anatomical and biochemical changes?
4	SEED/ADT/SST/RIC/2015/002 Study on the effect of seed management technologies on seed quality evaluation of stored seeds of rice variety ADT(R)46 Dr. K. Sasikala Feb. 2015 to March 2018	The project does not involve seed management practices to be evaluated for improving the storability of seeds of ADT 46.
5	SEED/TNJ/RIC/2015/001 Strategies to induce seed dormancy to mitigate pre harvest sprouting in rice variety ADT 43 Dr. N. Punithavathi January 2015 To December 2017	<i>Pre-harvest sprouting</i> in rice production is usually caused by high temperature and humidity or continuous rains. Whether pre-harvest sprouting is a problem in ADT43 rice variety. In the present study, attempts were made to induce dormancy in ADT43 by spraying NaCl and Maleic hydroxide. What is the germination percentage under control? Whether pre-harvest sprouting was observed in control?
6	SEED/TRY/SST/RIC/2013/001 Evaluation of Carbon monoxide and Nitric oxide donor based pre-sowing seed treatment for rice to overcome germination failure and poor seedling establishment under saline/ sodic soil condition Dr. T. Eevera October 2013 to September 2016	Both Carbon monoxide and Nitric oxide are signaling molecules for seed germination under abiotic stress conditions. In the experiment Haematin, a CO donor and sodium nitropruside, responsible for nitric oxide production were used. However, the experiment was not conducted under saline/sodic conditions to establish the role of CO and NO in alleviating germination problem under stressed conditions.

Agricultural Entomology

S. No.	URP Details	Remarks
--------	-------------	---------

1	<p>CPPS/ADT/ENT/RIC/2011/002 Development of tolerant/resistant rice genotypes against yellow stem borer Dr. S. Suresh Nov 13 to Oct 16</p>	<p>The project is on evaluating the rice genotypes for stem borer resistance using two different parameters viz. dead heart incidence and white ear incidence. However, both the parameters should be involved while assessing the levels of resistance across rice genotypes. Moreover, both the parameters are indirect measures only.</p>
2	<p>CPPS/ADT/ENT/RIC/2011/003 Studies on the monitoring of pest and their natural enemies in rice cropping sequence of Cauvery delta Zone Dr. S. Suresh Nov 13 to Oct 16</p>	<p>Reporting could have been done only on the pests and their natural enemies in rice cropping sequence, instead of bringing in various other outcomes.</p>
3	<p>CPPS/ADT/ENTO/RIC/2015/004 Optimization of time of release and conservation of <i>Trichogrammajaponicum</i> and <i>Trichogrammachilonis</i> for robust management of yellow stem borer and leaf folder in rice ecosystem Dr. V. G. Mathirajan Aug. 20 15 to July 2018</p>	<p>Experiments were not formulated to optimize the time of release <i>Trichogramma</i> for the management of yellow stem borer and leaf folder in rice</p>
4	<p>CPPS/CBE/AEN/13/048 Developing Nano matrices to regulate the release of pheromone to monitor Yellow stem borer, <i>Scirpophagaincertulasin</i> Rice Dr. M. Kannan November 2013 to October 2016</p>	<p>New numbering system should be adopted. While establishing the supremacy of electrospun pheromone matrix is it possible to say the absence of dead heart and white ear was because of electrospun pheromone matrix? How this can be established without any ambiguity? The efficiency of electrospun pheromone matrix may be established in stem borer endemic area (Rice Research Station, Thirupathisaram)</p>
5	<p>CPPS/CBE/ENT/RIC/2015/002 Baseline toxicity of newer insecticide molecules against rice BPH and rice leaf folder Dr. T. Manoharan Feb 2015 – Jan 2018</p>	<p>Whether the different populations of BPH (populations from Coimbatore, Ludhiana, East Godavari and Mandya) are being maintained at Paddy Breeding Station (PBS), Coimbatore?</p>
6	<p>ACMDU/MDU/AEN/14/008 Effect of foliar spraying of silicic and salicylic acids on inducing resistance against major pests of rice Dr. P. Chandramani September 2014 to August 2017</p>	<p>New numbering system should be adopted. Use of flyash and silicic acid in insect pest management is adopted since very long time. These experiments were conducted in AC&RI, Madurai in 1980s. Salicylic acid is one of the local, systemic and inter systemic regulator of plant defense. In the project, effects were only studied. Attempts should be made to understand the causes.</p>

7	ACMDU/MDU/AEN/15/New Screening of MLT and ART cultures against major insect pests of rice Dr. V. A. Vijayashanthi 2015 – 16	New numbering system should be adopted. Screening MLT and ART cultures cannot be considered as an individual project. It should be an integral part of major project.
8	ACTR/TRY/PAT/14/001 Identification of sources of resistance in rice to major pests and diseases under salt stress conditions. Dr. K. Chitra Dr. S. Sheeba Joyce Roseleen July 2014 to June 2017	New numbering system should be adopted. Why the entomology and pathology are combined? Screening MLT and ART cultures cannot be considered as an individual project. It should be an integral part of major project.
9	New project Combined effect of <i>Beauveria</i> and endophytic bacteria on stem borer (<i>Scirpophaga incertulas</i> Walker) and sheath blight disease (<i>Rhizoctonia solani</i> Kuhn.) in rice Dr. L. Karthiba Dr. S. Sheeba Joyce Roseleen April 2015 to March 2018	New numbering system should be adopted. Why the entomology and pathology are combined?
10	CPPS/KKM/ENT/RIC/2014/001 Studies on Species Diversity and Host Plant Resistance of Rice Stem Borer in Tamirabarani Tract in Tamil Nadu Dr. K. Elanchezhan Mrs. A. Kavitha Pushpam	Dead heart and white ear incidences were used for screening MLT cultures for stem borer resistance. Additional parameter used was phenol content. Was there any relationship between the three parameters involved?
11	CPPS/ASD/PAT/RIC/2014/002 Screening and evaluation of advanced and pre-release rice cultures against major diseases in Tamirabarani tract Dr. M. Ariavanamkatha Pillai Dr. N. Rajinimala July 2014 to June 2017	Why the entomology and pathology are combined? Screening MLT and ART cultures cannot be considered as an individual project. It should be an integral part of major project.
12	New Diversity of arthropods in rice production system as influenced by cultivation practices Dr. N. Sathiah July 2014 to June 2017	New numbering system should be adopted. The study area must be indicated. Project leader has to be changed.
13	CPPS/TPS/ENT/RIC/2013/001 Integrated Pest Management strategies for yellow stem borer, <i>Scirpophaga incertulas</i> (Walker) in rice ecosystem Dr. G. Preetha July, 2013 to June, 2016	Each Rice Research Station is having a project on Stem borer resistance rice. A common understanding should be made in allotting specific work to each station based on the available resources.
14	CPPS/TPS/ENT/RIC/2013/002 Evaluation of rice cultures for resistance to Yellow Stem Borer,	Dead heart and white ear incidences were used for screening MLT cultures for stem borer resistance. What is the need

	<i>Scirpophagaintertulas</i> (Walker) in Kanyakumari district Dr. G. Preetha July, 2013 to June, 2016	for two different projects?
15	DRES/PAI/AEN/2013/002 Evaluation of rice varieties and land races against paddy leaf mite (<i>Oligonychusoryzae</i>) Dr. P. Thilagam November 2013 - November 2015	New numbering system should be adopted. Project work involves only screening work. Basic studies should be included.

Plant Pathology

S. No.	URP Details	Remarks
1	TRRI/ADT/PAT/13/001 Management of major diseases of rice with new fungicides/ bactericides Dr.K. Rajappan September 2013 – August 2016	New project numbering system should be adopted. One of the statements in the report is “There was no significant difference between the incidences of any of the diseases among the treatments including control. Similarly the difference in grain yield among the treatments was also not significant including control”. What is the purpose of having new treatments?
2	CPPS/ADT/PAT/RIC/2014/001 Evaluation of PGPB for the management of sheath blight in the direct seeded and transplanted rice Dr.R.Thilagavathi Dr. G. Senthil Kumar September, 2014 – August, 2017	A total of 14 PGPB were isolated. The isolate TrRB3 was found to be effective to inhibit the growth of <i>R. solani</i> under <i>in vitro</i> condition. Plant growth promoting activity was assessed based seedling vigour index test. What are the other parameters to assess the growth promoting activity of the PGPB isolates? What is role of agronomist in this project?
3	CPPS/ADT/PAT/RIC/2015/005 Exploring <i>Bacillus</i> sp. for the control of bacterial leaf blight of rice caused by <i>Xanthomonasoryzae</i> sp. <i>Oryzae</i> Dr.R.Thilagavathi July 2015 – June 2018	The same work has been done under the project TRRI/ADT/PAT/13/001 The projects CPPS/ADT/PAT/RIC/2014/001 and CPPS/ADT/PAT/RIC/2015/005 can be merged together as suggested by the Director, CPPS.
4	CPPS/ADT/PAT/RIC/2014/002 Evaluation of endophytic bio-control agents against sheath rot of rice Dr.P. Ahila Devi October 2014 - September 2017	What are the sources of bio-control agents? The isolates collected and the details of characterization have to be given. When there are many isolates how one of the isolates sequence details of rDNA was presented? What was the isolate used in the field trial for the control of sheath rot?
5	CPPS/ADT/PAT/RIC/2014/003 Exploring the possibilities of using rhizosphere inhabiting <i>Streptomyces</i> sp for the management	The details of the isolates of <i>Streptomyces</i> sp made should be furnished. Instead all other details such compatibility and plant growth

	of Brown leaf spot of rice Dr.P. Ahila Devi October 2014 - September 2017	promoting activity are given. What was actual isolate used in the field study?
6	CPPS/ASD/PAT/RIC/2013/001 Management of rice blast using chemical fungicides and bio-pesticides Dr. N. Rajinimala July 2014 - May 2017	The outcome of the treatment having <i>Pseudomonas fluorescens</i> alone should be given. How one can establish the disease control if because of <i>Pseudomonas fluorescens</i> Azoxystrobin?
7	CPPS/ASD/PAT/RIC/2014/002 Screening of advanced and pre-release rice cultures against major insect pests and diseases of rice Dr. M. Ariavanamkatha Pillai Dr. N. Rajinimala July 2014 to June 2017	See the remarks given under the Entomology section.
8	CPPS/KKM/PAT/RIC/2015/001 Management of major fungal diseases of rice in Tamirabarani tract of Tuticorin District Dr. R. Akila February 2015- February 2018	What are the major fungal diseases targeted? The project is formulated for the management of major fungal diseases in rice. In that case what is the necessity for isolating native strains of PGPB?
9	ACMD/MDU/PAT/14/002 Innovative approaches for the management of bacterial leaf blight and bacterial leaf streak diseases of rice using antagonist and chemical Dr. M. Muthamilan April 2014 to March 2017	New project numbering system should be adopted. <i>Pseudomonas fluorescens</i> (Pf1) was found to be effective to control bacterial leaf blight and bacterial leaf streak. The results obtained from the project should be test verified under different locations.
10	ACMD/MDU/PAT/14/04 Identification of resistant genotypes against major diseases of rice Dr. N. Revathy May 2014 to April 2017	New project numbering system should be adopted. Screening MLT and ART cultures cannot be considered as an individual project. It should be an integral part of major project.
11	ACTR/TRY/PAT/14/001 Identification of sources of resistance in rice to major pests and diseases under salt stress conditions Dr. K. Chitra Dr. S. Sheeba Joyce Roseleen October 2014 – September 2017	New project numbering system should be adopted. See the remarks given under the Entomology section.
12	CPPS/TRY/PAT/RIC/2015/001 Combined effect of <i>Beauveria</i> and endophytic bacteria on stem borer (<i>Scripophaga incertulas</i> Walker) and sheath blight disease (<i>Rhizoctonia solani</i> Kuhn.) in rice Dr. L. Karthiba Dr. S. Sheeba Joyce Roseleen April 2015 to March 2018	What is meant by combined effect of <i>Beauveria</i> and endophytic bacteria on stem borer and sheath blight disease? <i>Beauveria</i> itself is an endophytic bacteria. What about other endophytic bacteria? What the project title means? Whether the 10 strains isolated were characterized?
13	CPPS/TPS/PAT/RIC/2015/001	Nothing substantial is made available

Screening of rice cultures to major diseases and management of sheath rot and grain discolouration Dr. M. Jayasekhar April 2015 – March 2018	from the project.
------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------

2. Decision made on the entries for Variety Release/ART/MLT from breeders

2. 1. Cultures in pipeline for release during 2016-2017

Three cultures were identified for the submission of variety release proposal during 2016-17, based on the results of MLT/ART and OFTs as detailed below:

TM 07278 (IET 23216): CVRC Release

Parentage : WGL 32100 / Swarna
Duration : 125 days
Mean Yield : 5477 kg/ha with an yield advantage of 17.8 % over IR 64 in Eastern region
Moderately resistant to leaf blast, RTD and brown spot
Non lodging plant type with medium slender grain type and high Head Rice Recovery percentage (62.4%)

CB 09123 (SVRC Release)

Parentage : BPT 5204 / CO (R) 50
Duration : 135 days suitable for Thaladi season
Average yield : 5982 kg/ha which is 4.67 and 8.40 per cent yield increase over ADT 49 and BPT 5204
Moderate resistance to BPH, WBPH , GLH and brown spot and tolerance to blast and sheath rot diseases
Medium slender grains with intermediate amylose

AD 09367

Parentage : BPT 5204 / I.W.Ponni
Duration : 158 days suitable for Samba season
Average yield : 7244 kg/ha which is 7.0 and 10.0 per cent yield increase over CR 1009 and ADT 50
Resistant to sheath blight and Moderately resistant to blast, BLB and sheath rot diseases
Medium slender grains with high Head Rice Recovery (66.2%)

2. 2. Cultures for Onfarm trials

The following cultures had completed two years of ART and are recommended for the conduct of OFT during 2016-17

Short duration	:	AD 07073, AS 10024, and TM 07335
Mid-Early duration	:	ACM 07001

Medium Duration	:	AD 08142
Rainfed Early	:	TM 09132, CB 06803, CB 08702

The compiled ART and OFT data will be scrutinized for the above cultures in the CSM 2017 and the cultures which is superior to the respective checks and other contemporary cultures will be recommended for the submission of variety release proposal.

2.3. Cultures recommended for Adaptive Research Trials 2016-17

Two early cultures namely TM 10085 and CB 12588; one drought tolerant culture TM 09135; three salt tolerant cultures viz., TR 05031, TR 09030 and I.W.Ponni *Saltol*; three early duration quality rice cultures viz., AD 09219, CB 10553 and AD(Bio) 09518; three medium duration quality rice cultures viz., AD 09493, CB 11107 and CB MAS 14065; one medium duration rice culture TNTRH 40 and two aromatic slender grain cultures namely VG 09006 and CB MAS 14142 are recommended for testing in Adaptive Research Trials viz., Rice 3,10,13,14,15,17 and 18/2016-17 respectively along with 17 checks. The details of the cultures are given below.

Cultures with Parentage and checks	Yield and Duration	Special attributes	Locations	Organizing centre
1. Rice 3/2016-17: Transplanted (Sornavari/Kar/ Kuruvai, April- July) 105-115 days				
TM 10085 (R) (ADT 43/CO 47)	5961 kg/ha in 118 days 10.8 % - ADT (R) 45 7.9 % CO 51	Resistant to Blast, Medium slender grains and head rice recovery of 58.0%, LER 1.33 and VER.3.10	All districts except Virudhunagar, Ramnad, Sivagangai and The Nilgiris	Coimbatore
CB 12588 (CB 04110/CB 05501) Checks: ADT(R) 45 Rice CO 51	5955 kg/ha in 118 days 14.6 % CO 51 17.1 % - ADT (R) 45	Resistant to Blast and MR to Brown spot Head rice recovery: 58.7% LER; 1.58 and BER; 1.50 with ideal volume expansion (VER; 3.90) and intermediate amylose.		
2. Rice 10/2016-17 Rainfed Early (Sep – Oct)				
TM 09135 (R) (Selection from IR 82639-B-B-115-1) Checks: TKM (R) 12 & Anna (R) 4	3848 kg/ha in 118 days 14.5% -TKM (R) 12	Drought tolerant	Ramnad, Sivaganga, Virudhunagar, Thoothukudi, Thiruvallur, Villupuram, Kancheepura	Tirur

			m	
3. Rice 13/2016-17 Salt stress Medium (Sep sowing)				
TR 05031(R) (ADT 39 /CO 45)	5433kg/ha in 135 days	Resistant to BLB and leaf spot diseases Moderately resistant to stem borer, leaf folder and blast	Trichy, Ramnad, Nagapattinam Thoothukudi Thiruvallur and Karaikal	Trichy
TR 09030 (R) (Mutant of TRY 2)	3842 kg/ha in 108 days	Long slender rice Score 3 for stem borer, BPH and GLH, score 5 WBPH, score 1 for leaf folder and gallmidge		
I.W.PonniSaltol (I.W.Ponni/FL478)// I.W.Ponni Checks: TRY 2, TRY 3, I.W.Ponni,	4108 kg/ha in 131 days 19.9 % increase over I.W.Ponni	Leaf folder incidence is low and resistant to blast Medium slender grains with good elongation of cooked rice (LER;1.51, BER; 1.47), good volume expansion(VER 4.1) and soft gel		
4. Rice 14/2016-17 Special transplanted Early (May-June sowing:105-115 days)				
AD 09219 (R) (ADT (R) 45 / ACK 03002)	6147 kg/ha in 115 days 16.0% increase over ADT 43	Moderately resistant to sheath blight, blast and BPH, Medium slender grains with HRR of 62.1%, good LER of 1.68 and VER (4.6)	All districts except Virudhunagar, Ramnad, Sivagangai and The Nilgiris	Aduthurai
CB 10553 (R) (BPT 5204/CB 05501)	6099 kg/ha in 119 days 15.4% increase over ADT 43	Moderately resistant to sheath blight. Long slender grains(L/B: 3.26)with an HRR of 55.8%, LER of 1.58 and VER (4.6)		

AD (Bio) 09518(R) (ADT 43/ IRBB 60-5-1) Checks: ADT 43 and Rice CO 51	5767 kg/ha in 118 days 9.1 % yield advantage over ADT 43	Moderately resistant to leaf folder, Medium slender grains with an HRR of 57.7%. The LER is 1.66 and VER is 4.1		
5. Rice 15/2016-17 Special transplanted Medium (September-October sowing): 125-140 days)				
AD 09493(R) (I.W.Ponni/Bansakthi)	6295 kg/ha in 131 days 14.50 % - TNAU Rice ADT 49 22.2 % - BPT 5204	Non lodging Medium Slender grains with HRR 63.1%. It has good elongation ratio upon cooking (LER- 1.78) and moderate volume expansion (VER-3.85) with an amylose content of 18.7 %.	All districts except Virudhunagar, Ramnad, Sivagangai, and The Nilgiris	Aduthurai
CB MAS 14065 (I.W.Ponni/Apo)	4968 kg in 132 days 28.1 % higher than TKM 13 5.8 % higher than BPT 5204	Short slender grain Moderately resistant to stem borer		
CB 11107 (BPT 5204/CO 50) Checks: ADT 49, BPT 5204 and TKM 13	5188 kg/ha in 137 days 11.4 % higher than BPT 5204	Moderately Resistant to Leaf folder and sheath rot HRR-47%, moderate cooking quality LER; 1.51 and BER; 1.45 with good volume expansion VER;4.3 and High Gelatinization temperature (ASV.2)		
6. Rice 17/2016-17 Hybrid rice – Medium Transplanted (Sept – Oct)				
TNTRH 40 (R) Checks: CORH 4, and CO (R) 50	6321 kg/ha in 10.4% over CORH 4 8.3 % over CO(R) 50	MR to stem borer brown spot and leaf blast. It has an LER of 1.55 with moderate volume expansion ratio (3.60) and intermediate	All districts except Ramnad, Virudhunagar, Sivagangai and The Nilgiris	Coimbatore

		amylose content (21.0%).		
7. Rice 18/2016-17 Aromatic slender grain Medium Transplanted (Sept.-Oct)				
VG 09006 (ADT 43/ <i>J.Samba</i>)	4695 kg/ha in 128 days 33.2% - <i>J.Samba</i> 33.8% - TKM 13	MR to brown spot Short slender grain with good linear elongation ratio	Vellore, Dharmapuri, Salem, Erode, Coimbatore, Dindigul, Theni, Karur, Trichy and Perambalur	Coimbatore

2. 4. Cultures recommended for Multi Location Trials 2016-17

MLT I (100- 115 days; May-June sowing) 2016-17

Entry	Parentage	Duration (days)	Grain yield (kg/ha)	Rice grade	Nominating Centre
Repeat					
AS 12104 (R)*	ADT (R) 45/Raskadam	117	5787	MS	Ambasamudram
New					
AD 10034	ADT(R) 47 / Swarna	115	5063	MS	Aduthurai
AD 09206*	ADT 43 / ADT 37	113	4852	MS	Aduthurai
CB 14508*	ADT 37 / CB 05501	109	6988	MS	Coimbatore
CB 14533	Bhavani / CB 05501	111	6907	SS	Coimbatore
CB 13539	ADT 43 / GEB 24	112	6813	SS	Coimbatore
ACK 14001	ACK 9009 / ASD 16	115	7307	MB	Killikulam
ACK 14004	IR 8 / ASD 16	115	7391	MS	Killikulam
AS 12051*	BPT 5204 / ASD 16	115	6483	MS	Ambasamudram
TR 13069	ADT 43 / FL478//ADT 43	105	5139	MS	Trichy
TR 13083	ADT 43 / FL478//ADT 43	105	5171	MS	Trichy
TNRH 290*	TNAUCMS2A / CB250R	115	6356	MS	Coimbatore

* Quality Cultures

Checks	:	Rice CO 51, ADT 43, TPS 5 and CORH 3
Replications	:	Three
Plot size	:	12 m ²
Spacing	:	15 x 10 cm
Locations (8)	:	Aduthurai, Coimbatore, Madurai, Ambasamudram, Tirur, Thirupathisaram, Killikulam, Thanjavur
Seed despatch	:	Nominating centres should supply 3.0 kg cleaned seeds in each

	entry to Aduthurai before 28.05.2016
--	---------------------------------------------

MLT II (115-125 days, September 15th - October 15th sowing) 2016-17

Entry	Parentage	Duration (days)	Grain yield (kg/ha)	Rice grade	Nominating Centre
Repeat					
AD 12132 (R)	ADT 39/Konark	128	5368	MS	Aduthurai
TP 08053	ADT 36/ADT 42	123	5335	MS	Thirupathisaram
TNTRH 55	TNAU 60 S/CB 55	124	5002	MS	Coimbatore
ACK 13005	IR 68890 /Norungan	127	4827	MS	Killikulam
New					
AD 12178*	I.W.Ponni / Kalajoha	125	6424	MS	Aduthurai
CB 14529*	Bhavani / CB 05501	122	6727	MS	Coimbatore
CB 13532	CB 05501/GMS 46	120	6600	MS	Coimbatore
CB 14552	CO 47 / CB 04110	120	6593	MS	Coimbatore
AD (BIO) 13042*	ADT 43 / IR BB60	125	5928	MS	CPMB
AS 12006	ADT 37 / CO 50	125	7792	SB	Ambasamudram
ACK 12014	Mutant of White Ponni	122	6393	MB	Killikulam
ACK 12020	Mutant of White Ponni	120	6350	MB	Killikulam
TNRH 264	TNAUCMS 2A / CB264R	127	6992	MS	Coimbatore

* Quality Cultures

Checks	:	ADT 39, TKM 13, and US 312
Replications	:	Three
Plot size	:	12 m ²
Spacing	:	15 x 10 cm
Locations (8)	:	Aduthurai, Coimbatore, Madurai, Ambasamudram, Tirur, Thirupathisaram, Killikulam, Thanjavur
Seed despatch	:	Nominating centres should supply 3.0 kg cleaned seeds in each entry to Aduthurai before 06.06.2016

MLT III (131-140 days, September/October sowing) – 2016-17

Entry	Parentage	Duration (days)	Grain yield (kg/ha)	Rice grade	Nominating Centre
Repeat					
CB 12132*	CO (R) 50/CB 05501	137	5180	MS	Coimbatore
TP 09156	Swarna /ADT 40	138	5483	MS	Thirupathisaram
New					

AD 12105	I.W.Ponni / Kalajoha	135	6921	MS	Aduthurai
AD 12205	I.W.Ponni / Swarna	138	6369	MS	Aduthurai
AD 12228*	ADT (R) 47 / PR 106-23-1	131	6415	MS	Aduthurai
AD 11168*	Imp. Rasakadam / ASD 19	131	6018	MS	Aduthurai
CB 12122*	BPT 5204 / CO (R) 48	139	7522	MS	Coimbatore
CB 13204*	CO (R) 50 / JGL 3844	137	7334	SS	Coimbatore
AS 12035	BPT 5204 / ADT 37	135	6392	MS	Ambasamudram

- Quality Cultures

Checks	:	CO (R) 50, ADT (R) 46, ADT 49, and BPT 5204
Replications	:	Three
Plot size	:	12 m ²
Spacing	:	20 x 10 cm
Locations (11)	:	Aduthurai, Ambasamudram, Coimbatore, Madurai, Thirupathisaram, Sirugamani, Tirur, Killikulam, Vaigaidam, Thanjavur and Paiyur
Seed despatch	:	In each entry, 4.0 kg cleaned seeds to be supplied to Aduthurai before 06.06.2016

MLT IV (140 – 160 days, Aug.15th – Sept.10th sowing) – 2016-17

Entry	Parentage	Duration (days)	Grain yield (kg/ha)	Rice grade	Nominating Centre
Repeat					
AD 11150	BPT 5204/Azucena	145	6460	MS	Aduthurai
AD 13116*	CR 1009/ADT 49	145	6094	MS	Aduthurai
New					
AD 14134*	CR 1009 / CR 1014	160	6469	MS	Aduthurai
AD 14191*	CR 1009 / Mahalakshmi	147	6033	MS	Aduthurai
AD 12074	ADT (R) 47 / PR 106-23-1	146	6764	SB	Aduthurai
AD 13125	CR 1009 / KR1	155	6682	SB	Aduthurai

- * Quality Cultures

Checks	:	ADT 50, CR 1009 <i>Sub1</i>
Replications	:	Four
Plot size	:	12 m ²
Spacing	:	20 x 15 cm
Locations (9)	:	Aduthurai, Coimbatore, Thirupathisaram, Thanjavur, Sirugamani,

		Palur, Ambasamudram, KVK, Needamangalam, Kumulur
Seed despatch	:	Nominating centres should supply 3.5 kg seeds in each entry to Aduthurai before 06.06.2016

MLT – Saline/Alkaline - 2016-17

Entry	Parentage	Duration (days)	Grain yield (kg/ha)	Rice grade	Nominating Centre
Repeat					
TR 09027	Mutant of TRY (R) 2	105	4603	MS	Trichy
New					
TR 13069	ADT 43 / FL478//ADT 43	105	5139	MS	Trichy
TR 13083	ADT 43 / FL478//ADT 43	105	5171	MS	Trichy

Checks	:	TRY (R) 2 and ADT 43
Replications	:	Three
Plot size	:	12 m ²
Spacing	:	15 x 10 cm
Locations (4)	:	Trichy, KVK, Ramanathapuram, KVK, Tindivanam (Madurandagam)*, PAJANCOA & RI, Karaikal
Seed despatch	:	Nominating centres should supply 2.0 kg seeds in each entry to Aduthurai before 31.05.2016

Scientists of ADAC&RI, Trichy in cooperation with KVK, Tindivanam are requested to identify suitable field for sodicity to conduct the MLT saline/alkaline trial near Madhurandhagam area.

MLT - Drought (September sowing) – 2016-17

Entry	Parentage	Duration (days)	Grain yield (kg/ha)	Rice grade	Nominating Centre
Repeat					
CB 12702	IR 80021-B-86-3-4-CRD-1-2-1	119	3493	LS	Coimbatore
TM 12061	Senthooram / Vandana	117	3683	MS	Tirur
New					
CB 13804	Norungan / SwarnaSub1 x Norungan	105	3779	MS	Coimbatore
CB 13805	Norungan / SwarnaSub1 x Norungan	107	3545	MS	Coimbatore
TM 12039	ADT (R) 45 / Chandikar	110	3430	MS	Tirur
TM 12057	Andra local / Apo	110	4413	MS	Tirur
PM	IR 55419-4*2/ Way rarem	113	3055	LS	Paramakudi

12009					
TM 12077	TKM (R) 12 / IET 21620	118	3692	MS	Tirur

Checks	:	TKM (R) 12, Anna (R) 4, IR 64 dt QTL
Replications	:	Three
Plot size	:	12 m ²
Spacing	:	15 x 10 cm
Locations (5)	:	Aerobic: Coimbatore \$, Madurai Dry and Semi dry : Tirur and Paramakudi\$
Seed despatch	:	Nominating centres should supply 3.0 kg seeds in each entry to Aduthurai before 31.05.2016

\$- Small non replicated plots may be raised in rainout shelter to assess the genotypes for drought condition

Rice Multi Location Trial Monitoring Team 2016-17.

No	MLT stations	Team Members
1	Aduthurai/Thanjavur/ KVK, Needamangalam	Dr. S. Manonmani, Dr.A.Sheeba Dr.S.Muthuramu
2	Coimbatore/Bhavanisagar	Dr. S.Geetha Dr.S. Saravanan Dr.G.Anand
3	Ambasamudram /Thirupathsaram/Killikulam	Dr. P. Jeyaprakash Dr.T.Thirumurugan Dr.N.Aanathi
4	Tirur/ Palur/ KVK, Tindivanam	Dr. M. ArumugamPillai Dr.R.Pushpa Dr.P.Arunachalam
5	Trichy/Sirugamani / KVK, Sikkal	Dr.A. Ramalingam Dr.R.Suresh Dr.S.Santha
6	Madurai /Vaigaidam	Dr.N.Shunmugavalli Dr.R.Saraswathi Dr.A. Muthusamy
7	Paramakudi/Ramanathapuram	Dr. S. Banumathy Dr.K.Amudha
8	Paiyur	Dr. S. Arumugachamy Dr.D.Sassikumar

3. Decision made on OFT evaluation for technologies from Crop Management

For Adoption

1. Weed management in transplanted rice

Pre emergence application of Pretilachlor 750 g a.i ha⁻¹ at 3 DAT + Post emergence chlorimuron and metsulfuron 4 g a.i ha⁻¹ at 25DAT is found to be suitable weed management practice for transplanted rice

2. Weed management in wet seeded rice

Pre emergence application of Pendimethalin 1.0 kg ai ha⁻¹ at 8 DAS + POE Bispyribac sodium 25 g ha⁻¹ at 25 DAS + HW on 45 DAS is found to be suitable weed management practice for wet seeded rice.

On Farm Trial

1. Split application of N and K in semi-dry rice cultivation (OFT 2015-16 to be continued during 2016-17) As rice variety Anna 4 is to be tested in all the centers, this OFT is to be continued during 2016-17.

Objective: To find out optimum time of split application of N and K for Anna 4 variety.

Treatment details

T₁: Basal application of RDF (75: 25: 37.5 kg NPK/ ha)

T₂: Full dose of P + 1/4th N and K as basal and top dressing of 3/4th N and K on 25, 45 and 65 DAS in three equal splits

Co-ordinating Centre : ARS, Paramakudi

Centres : Paramakudi: Dr. S. Sakithivel, Professor
(Agronomy) Ramanathapuram: Dr. K. Saravannan, AP
(SS& AC)
Chettinad: Dr. N. Satheshkumar, AP (Agronomy)

2. Evaluation of stage-specific microbial inoculants for direct sown rice

Objective: To assess the performance of stage-specific inoculants for nutrient uptake and yield increase in rice

Treatments

T₁– 75% RDF+ Stage specific microbial inoculants

T₂– 75% RDF+ Existing method (seed treatment & soil application with Azophos)

T₃– 100% RDF alone

Co-ordinating Centre : **Dept. of Agri. Microbiology, TNAU, Coimbatore**
Centres : Coimbatore : Dr. D. Balachandar and Dr. K. G. Anitha
Madurai : Dr. B. JebrelinPrabina
Killikulam : Dr. R. Umasankareshwari
Aduthurai : Dr. M. Jeyabharathi
Trichy : Dr. K. G. Sabarinathan
Tirur : Dr. H. Gopal

Remarks made during the meet

Crop Improvement

I. Specific Recommendations

1. All the new varieties need to be popularized through production and supply of adequate quantity of breeder seeds and seeds of other classes (Director, CPBG and Special Officer (Seed Centre))
2. Assessment on varietal adoption need to be carried out periodically to assess the varietal spread (All Rice Research Centers of TNAU)
3. Pest and disease reactions for aromatic cultures need to be established. Cultures identified for resistance against key pests have to be registered with NBPGR
4. Team efforts of the scientists by including a soil scientist of ADAC&RI, Trichy in cooperation with KVK, Tindivanam to identify suitable field for the conduct of MLT saline/alkaline trial near Madhurandhagam area.
5. Special ART for aromatic slender rice constituted during this year(2016-17) is to be monitored effectively by the scientist from Vaigai Dam and Coimbatore centre. The locations for the ART are Vellore, Dharmapuri, Salem, Erode, Coimbatore, Dindigul, Theni, Karur, Trichy and Perumbalur districts.

II. General Recommendations:

1. Pedigree register and crossing register need to be maintained in all the rice research stations. Selection of too many cultures without any substantial improvement from single cross combination may be avoided.
2. Designated checks which include newly released varieties should be included in all the Station yield trials in line with the respective MLTs. New nomination without the comparison of designated checks will not be considered for MLT evaluation.
3. The new nominations for MLT would be considered only if the nominating center has conducted the comparative yield trials and Multi Location Trials for two years consecutively.
4. Quality analysis of MLT cultures may be taken at Dept. of Rice, Coimbatore during 2016-17. The ART cultures needs to be analyzed for quality at Coimbatore, Aduthurai and Home Science College, Madurai

