

PROCEEDINGS OF THE 36th CROP SCIENTISTS' MEET (RICE) 2017

The 36th Crop scientists' Meet 2017 was held on 24.05.2017 under the chairmanship of the Vice Chancellor, TNAU 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 scientists have presented the Action taken on the Recommendations and Action Plan of the 35th Crop Scientist Meet. Based on the discussion and review of projects by the Director (CPBG), Director (CPMB), Director (CM), Director (CPPS) and the Director of Research in the concurrent session held on 23.05.2017, the following recommendations and action plans that were emanated were presented by the Technical Directors for approval by the Chairman. The meet ended with the critical remarks by the Vice Chancellor and vote of thanks by Director of Research, TNAU, Coimbatore.

A. CROP IMPROVEMENT

I. SPECIFIC RECOMMENDATIONS

1. Performance of ART cultures should be compiled and presented comprehensively by the lead center to identify best culture for release in each duration group (Aduthurai).
2. Cultures identified for testing UNDER Adaptive Research Trial should be coded and test locations are to be increased in the districts where rice area and productivity are more (Aduthurai).
3. Nomination of cultures for evaluation under AICRIP program has to be done through Director, CPBG with a copy marked to Director of Research (All the centers).
4. The MLT repeat cultures need to be evaluated in agronomy trials as followed in AICRIP system (Aduthurai, Coimbatore, Ambasamudram, and Madurai).
5. Extra early rice varieties are to be collected and evaluated to identify varieties maturing in 60 – 80 days (Aduthurai and Coimbatore).
6. Long duration ART culture AD 13116 has to be tested for fodder quality in collaboration with Dept of Forage crops (Aduthurai).
7. Screening of designated pest and diseases for MLT cultures may be done at Ambasamudram and Killikulam in addition to regular screening centers.
8. Paramakudi and Tirur could undertake breeding program exclusively for rainfed ecosystem in coordination with Madurai centre.

II. GENERAL RECOMMENDATIONS

1. MLT data with the trial mean of less than 4.0 tons/ha should not be considered for analysis and compilation.
2. No. of crosses have to be restricted based on the objectives and the population size in the segregating generations may be increased.
3. More attention is to be paid to develop demand driven multi-utility rice varieties.

III. CULTURES RECOMMENDED FOR SUBMISSION OF RELEASE PROPOSAL DURING 2017-18

Three cultures were identified for the submission of variety release proposal during 2017-18, based on the results of AICRIP/MLT/ART and OFTs as detailed below:

i. CVRC Release**1. TM 07275 (IET 22565)**

Parentage : WGL 32100 / Swarna

Duration : 125 - 130 days

Mean Yield : 4988 kg/ha with yield advantage of 27.0 per cent higher than IR 64

Moderately resistant to leaf folder, GLH, blast, RTD, brown spot and sheath rot

Grain type is medium slender, fine grain with 1000 grain weight of 13.8 g

High milling (70.9%) and head rice yield (68.8%)

ii. SVRC Release**1. AD 09367 (IET 23617)**

Parentage : BPT 5204/I.W.Ponni

Duration : 155 – 160 days

Mean Yield : 6595 kg/ha with yield advantage of 10.6 per cent higher than CR 1009

Resistant to blast and moderately resistant to BPH, sheath blight and sheath rot.

Medium white rice with 1000 grain weight of 23.9 g.

High milling yield (70.3%) and head rice yield (60.5 %).

2. AD 07073 (IET 23955)

Parentage : ADT 43/JGL 384

Duration : 110 - 115 days

Mean Yield : 6126 kg/ha with yield advantage of 12.0 per cent higher than ADT 43

Moderately resistant to blast and WPBH.

Medium slender rice with intermediate amylose and LER of 1.70.

Head rice recovery: 65.0 %.

iii. Cultures identified for On Farm Trials (2017-18)

The following cultures had completed two years of ART and so, they are recommended for the conduct of OFT during 2017-18.

| | | |
|-----------------|---|---------------------------------------|
| Short duration | : | TM 10085, AD 09219 and AD (Bio) 09518 |
| Rainfed Early | : | TM 09135 |
| Salt tolerant | : | TR 05031, TR 09030 |
| Medium Duration | : | AD 09493 |

The OFT will be laid with all contemporary cultures and the latest released variety as check. The performance of the cultures will be scrutinized along with the pest, disease score and grain quality attributes. The best performing cultures will be recommended for the submission of variety release proposal.

iv. Cultures recommended for Adaptive Research trials (2017-18)

A total of 11 cultures and one two line hybrid TNTRH 55 had been approved for testing in various Adaptive Research trials during 2017-18. One early duration culture, CB 12588, three salt tolerant cultures viz., TR 05031, TR 09030 and I.W.Ponni *Saltol*, two medium duration cultures viz., CB MAS 14065 and CB 11107 and two aromatic slender grain cultures viz., VG 09006 and CB MAS 14142 are to be tested in second year of ART. The details of the cultures are given below.

| Cultures with Parentage and checks | Yield and Duration | Special attributes | Locations |
|--|---|--|--|
| Rice 3/2017-18: Transplanted (Sornavari/Kar/Kuruvai , April – July) 100- 110 days | | | |
| CB 12588 (R) (CB 04110/CB 05501) Check: CO 51 | 5955 kg/ha in 118 days 14.6 % - Rice CO 51 17.1 % - ADT (R) 45 | Resistant to Blast and MR to Brown spot HRR: 58.7 % LER; 1.58 and BER; 1.50 and intermediate amylose. | All districts except Virudhunagar, Ramnad, Sivagangai and The Nilgiris |
| Rice 4/2017-18: Transplanted (Oct 25 – Nov 10, 110 to 125 days) | | | |
| AD 12132 (ADT 39/Konark) | 5608 kg/ha in 128 days 19.4 % higher than ADT 39 | Moderately resistant to blast and resistant to brown spot LER - 1.64; BER - 1.48 Intermediate amylose | All districts except Virudhunagar, Ramnad, Sivagangai, Kanyakumari and The Nilgiris |
| TP 08053 (ADT 36/ ADT 42) Check: ADT 39 | 5464 kg/ha in 124 days 16.3 % higher than ADT 39 | Long slender Rice LER – 1.49 Intermediate amylose Moderately resistant to blast and sheath rot | |
| Rice 6/2017-18: Transplanted (August 15 - September 10) 140 days and above | | | |
| AD 13116 (CR 1009/ADT 49) Check : CR 1009 <i>sub</i> 1 | 6032 kg/ha in 145 days 8.1 % higher than ADT 50 and 9.24 % over CR 1009 <i>sub</i> 1 | Medium slender rice with LER – 1.77 Intermediate amylose Moderately resistant to blast and BLB | Ariyalur,Cuddalore, Trichy, Perambalur, Karur, Pudukkottai, Thanjavur, Thiruvarur and Nagapattinam |
| Rice13/2017-18: Salt stress Medium (Sep. sowing) | | | |
| TR 05031(R) (ADT 39 /CO 45) | 5433 kg/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, Kancheepuram and Karaikal |
| TR 09030 (R) (Mutant of TRY 2) | 3842 kg/ha in 108 days | Long slender rice Resistant to BPH and GLH and Gall midge | |
| I.W.Ponni <i>Saltol</i> (R) (I.W.Ponni/FL478)// I.W.Ponni Checks: TRY (R) 3 | 4108 kg/ha in 131 days 19.9 % increase over I.W.Ponni | Resistant to blast Medium slender LER;1.51, BER; 1.47 and soft gel | |

| Rice15/2017-18: Special transplanted Medium (September-October sowing:125-140 days) | | | |
|---|--|--|--|
| CB MAS 14065(R) (I.W.Ponni/Apo) | 4968 kg/ha in 132 days 28.1 % higher than TKM 13. 5.8 % higher than BPT 5204 | Short slender grain Moderately resistant to stem borer | All districts except Virudhunagar, Ramnad, Sivagangai, and The Nilgiris |
| CB 11107(R) (BPT 5204/CO 50) Checks: ADT49 and TKM 13 | 5188 kg/ha in 137 days 11.4 % higher than BPT 5204 | Moderately Resistant to sheath rot LER - 1.51 & BER - 1.45 | |
| Rice18/2017-18: Aromatic slender grain (September – October sowing: 125 – 140 days)** | | | |
| VG 09006(R) (ADT 43/J.Samba) | 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 |
| CB MAS 14142(R) (I.W.Ponni /Apo) Checks: <i>J.samba</i> TKM 13 and Pusa Basmati 1 | 4647 kg/ha in 120 days 6.2% over Pusa Basmati 1 | Long slender grain with good linear elongation ratio. Resistant to Brown spot | |
| Rice19/2017-18: Hybrid rice Mid Early(Oct 25 – Nov 10, 110 to 125 days) | | | |
| TNTRH 55 Check : ADT 39 | 5414 kg/ha in 124 days 15.3 % over ADT 39 | Long bold grain with good Linear Elongation (LER: 1.76) | All districts except Virudhunagar, Ramnad, Sivagangai, Kanyakumari and The Nilgiris |

** As per the 35th CSM Proceedings, the sponsoring scientist for ART-18 should bestow efforts for the conduct of trial in specified districts and an exclusive monitoring team has to be formulated to visit the ARTs.

v. Cultures recommended for Multi Location Trials 2017-18

MLT I (100- 115 days; May-June sowing) 2017-18

| Entry | Parentage | Duration (days) | Grain yield (kg/ha) | Rice grade | Nominating Centre |
|---------------|--------------------|-----------------|---------------------|------------|-------------------|
| Repeat | | | | | |
| CB 14508* | ADT 37 / CB 05501 | 109 | 6988 | MS | Coimbatore |
| New | | | | | |
| ACK 14001 | ACK 9009 / ASD 16 | 115 | 7307 | MB | Killikulam |
| ACK 14004 | IR 8 / ASD 16 | 115 | 7391 | MS | Killikulam |
| AD 14098* | ADT 41 / IR 50 | 114 | 6621 | MS | Aduthurai |
| AD 13036* | ASD 16 / ADT 36 | 116 | 6408 | LS | Aduthurai |
| AD(Bio) 13060 | ADT 43 / IR BB 60 | 115 | 6073 | MS | CPMB |
| AS 13355 | ASD 16 / ADT 43 | 115 | 6938 | SB | Ambasamudram |
| AS 14017 | Sona / ASD 16 | 115 | 6933 | MS | Ambasamudram |
| CB 13529 | CB 05501/IET 20553 | 116 | 6627 | MS | Coimbatore |
| CB 14536 | Bhavani/CB 05501 | 115 | 6856 | MS | Coimbatore |

*Quality Rice

| | | |
|----------------|---|--|
| Checks | : | Rice CO 51, TPS 5 |
| Replications | : | Three |
| Plot size | : | 9 m ² |
| Spacing | : | 15 x 10 cm |
| Locations (12) | : | Aduthurai, Coimbatore, Madurai, Ambasamudram, Tirur, Paiyur, Thirupathisaram, Killikulam, Thanjavur, Cuddalore, Pattukottai, Vaigaidam |
| Seed despatch | : | Nominating centres should supply 5.0 kg in each entry to Aduthurai before 31.05.2017 |

MLT II (115-125 days, September/October sowing) 2017-18

| Entry | Parentage | Duration (days) | Grain yield (kg/ha) | Rice grade | Nominating Centre |
|----------------|---|-----------------|---------------------|------------|-------------------|
| New | | | | | |
| ACK 13010 | IR 68890 / Norungan | 125 | 6331 | SB | Killikulam |
| ACK 12021* | Gamma Ray mutant of I.W. Ponni | 125 | 6605 | MS | Killikulam |
| AD 12286 | AD 01246 / TR 106 | 125 | 4919 | MS | Aduthurai |
| AD (Bio) 13066 | ADT 43 / IR BB 60 | 125 | 6010 | MS | CPMB |
| AS 14023 | Sona / ASD 16 | 120 | 7536 | MS | Ambasamudram |
| AS 14032 | Manjalsaradai / ASD 16 | 120 | 7143 | MS | Ambasamudram |
| CB 14502 | ADT 43 / IET 20553 | 125 | 6952 | MS | Coimbatore |
| CB 14811 | CB 04011 / ADT 39 // JGL 1798 / Rasacadam | 126 | 6448 | SS | Coimbatore |
| TNRH 285 | CMS 2A / CB 285R | 124 | 7117 | MS | Coimbatore |

*Quality Rice

| | | |
|---------------|---|---|
| Checks | : | ADT 39, TKM 13 and US 312 |
| Replications | : | Three |
| Plot size | : | 9 m ² |
| Spacing | : | 20 x 10 cm |
| Locations(9) | : | Aduthurai, Coimbatore, Madurai, Ambasamudram, Tirur, Thirupathisaram, Killikulam, Thanjavur, Paiyur |
| Seed despatch | : | Nominating centres should supply 5.0 kg seeds in each entry to Aduthurai before 09.06.2017 |

MLT III (131-140 days, September/October sowing) – 2017-18

| Entry | Parentage | Duration (days) | Grain yield (kg/ha) | Rice grade | Nominating Centre |
|---------------|----------------------|-----------------|---------------------|------------|-------------------|
| Repeat | | | | | |
| CB 12132 | CO (R) 50 / CB 05501 | 137 | 5180 | MS | Coimbatore |
| New | | | | | |
| AD 12161 | I.W.Ponni / Kalajoha | 137 | 5712 | MS | Aduthurai |

| | | | | | |
|----------|-----------------------|-----|------|----|------------|
| AD 13299 | ADT 43 / IR 64 | 135 | 5817 | MS | Aduthurai |
| CB 13132 | CO (R) 49 / KJTCMS 4B | 139 | 7513 | SS | Coimbatore |
| CB 13168 | CO (R) 50 / IET 19577 | 135 | 7512 | SS | Coimbatore |
| TNRH 273 | CMS 2A / CB 273R | 133 | 6868 | MS | Coimbatore |

| | | |
|---------------|---|--|
| Checks | : | CO (R) 50, ADT 49, CO 52 |
| Replications | : | Three |
| Plot size | : | 9 m ² |
| Spacing | : | 20 x 10 cm |
| Locations(13) | : | Aduthurai, Ambasamudram, Coimbatore, Madurai, Thirupathisaram, Sirugamani, Tirur, Killikulam, Vaigaidam, Thanjavur, Palur, Cuddalore and Pattukottai |
| Seed despatch | : | In each entry, 5.5 kg seeds to be supplied to Aduthurai before 09.06.2017 |

MLT IV (140 – 160 days, Aug.15th – Sept.10th sowing) – 2017-18

| Entry | Parentage | Duration (days) | Grain yield (kg/ha) | Rice grade | Nominating Centre |
|---------------|---------------------|-----------------|---------------------|------------|-------------------|
| Repeat | | | | | |
| AD 13125 | CR 1009 / KR1 | 155 | 6682 | SB | Aduthurai |
| New | | | | | |
| AD 12184* | IW.Ponni/Kalajoha | 143 | 6747 | MS | Aduthurai |
| AD 13121* | ADT 49/CR 1009 | 145 | 6657 | MS | Aduthurai |
| AD 14175 | Salivahana/KL 05027 | 150 | 6624 | MB | Aduthurai |
| AD 14142 | CR 1009/CO 48 | 158 | 7038 | MS | Aduthurai |

*Quality Rice

| | | |
|---------------|---|---|
| Checks | : | ADT 50, CR 1009Sub 1 |
| Replications | : | Four |
| Plot size | : | 9 m ² |
| Spacing | : | 20 x 15 cm |
| Locations (8) | : | Aduthurai, Coimbatore, Thirupathisaram, Thanjavur, Sirugamani, Palur, Ambasamudram, KVK, Needamangalam* |
| Seed despatch | : | Nominating centres should supply 4.5 kg seeds in each entry to Aduthurai before 09.06.2017. |

* The trial at KVK, Needamangalam is to be conducted at the supervision of the plant Breeder from SWMRI, Thanjavur. The layout and the yield recordings are to be done by the concerned breeder.

MLT – Saline/Alkaline - 2017-18

| 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 | ADT43/FL478//ADT 43 | 105 | 5139 | MS | Trichy |
| TR 13083 | ADT 43 / FL478//ADT 43 | 105 | 5171 | MS | Trichy |

| | | |
|---------------|---|---|
| Checks | : | TRY (R) 2 |
| Replications | : | Four |
| Plot size | : | 9 m ² |
| Spacing | : | 15 x 10 cm |
| Locations (4) | : | Trichy, KVK, Ramanathapuram, KVK, Tindivanam (Madurandagam), KVK Sikkal |
| Seed despatch | : | Nominating centres should supply 3.0 kg seeds in each entry to Aduthurai before 31.05.2017. |

MLT - Water stress (September sowing) – 2017-18

| Entry | Parentage | Duration (days) | Grain yield (kg/ha) | Rice grade | Nominating Centre |
|---------------|-----------------------------|-----------------|---------------------|------------|-------------------|
| Repeat | | | | | |
| TM 12077 | TKM (R) 12 / IET 21620 | 118 | 3692 | MS | Tirur |
| New | | | | | |
| TM 12039 | ADT (R) 45 / Chandikar | 110 | 3430 | MS | Tirur |
| TM 13018 | ADT 43 / UPLRI 7 | 118 | 3387 | MS | Tirur |
| CB 14756 | CB04110/Hinohikari/CB 04110 | 121 | 5969 | SS | Coimbatore |
| CB 14530 | Bhavani / CB 05501 | 122 | 5845 | MS | Coimbatore |
| PM 14042 | IR 84895-B-127-CRA-5-1-1 | 109 | 3154 | MS | Paramakudi |

| | | |
|---------------|---|---|
| Checks | : | TKM (R) 12, Anna (R) 4, IR 64 dt QTL |
| Replications | : | Three |
| Plot size | : | 9 m ² |
| Spacing | : | 20 x 10 cm |
| Locations (4) | : | Coimbatore, Tirur, Paramakudi and Chettinad |
| Seed despatch | : | Nominating centres should supply 4.0 kg seeds in each entry to Aduthurai before 30.06.2017. |

- At Paramakudi, trial is to be conducted both at field and ROS.
- Apart from the regular observations, Drought Sensitivity (DRS), Leaf Drying at vegetative stage, Spikelet Fertility and Drought Recovery (DRR) need to be recorded

RICE MULTILOCATION TRIALS MONITORING TEAM 2017-18

| S. No | MLT stations | Monitoring team leader & members 2017 |
|-------|--|--|
| 1. | Aduthurai/Thanjavur/ KVK, Needamangalam, Pattukottai | Dr. S. Banumathy Dr. K. Amudha Dr. D.Kumaresan |
| 2. | Coimbatore | Dr.R.P.Gnanamalar Dr.A.Sheeba |
| 3. | Ambasamudram / Thirupathsaram / Killikulam | Dr.J. Ramalingam Dr.S.Muthuramu Dr.R.Pushpa |

| | | |
|----|--|---|
| 4. | Tirur/ Palur/ KVK, Tindivanam/ Cuddalore | Dr. P. Jeyaprakash Dr. M. Madhanmohan Dr.L.Subha |
| 5. | Trichy/Sirugamani / KVK, Sikkal | Dr.R.Saraswathi Dr. N.Aanathi Dr.A. Muthusamy |
| 6. | Madurai /Vaigaidam/Chettinad | Dr.N.Shunmugavalli Dr. M. Raveendran Dr.R.Manimaran |
| 7. | Paramakudi/Ramanathapuram | Dr.S.Arumugachamy Dr.R.Suresh |
| 8. | Paiyur | Dr. M. Arumugampillai Dr.T.Thirumurugan |

The monitoring team will visit at appropriate stage of the trial and report on

1. General conduct of the trial
 - a. Plot size and replications
 - b. Labelling of the plots
2. Admixtures, Disease and pest susceptibility if any
3. Top two entries based on visual observation
4. General remarks of the trial and entries.

IV. WORK MODULE FOR THE YEAR 2017-18 TO THE ACTION PLAN (2016-2019) ON THE IDENTIFIED THEMES

| | | | |
|---------------------|--|---|---|
| Theme No 1 | Germplasm characterization and Pre Breeding to develop genetic stocks in rice | | |
| Theme Leader | Dr.P.Jeyaprakash, Professor and Head, Department of Rice, TNAU, Coimbatore. | | |
| Sub Theme 1 | Screening of 250-300 Rice accessions from Ramaiah Gene Bank to identify genotypes resistant to biotic and abiotic stress | | |
| S.No | Activity | Name of the scientist and centre | Work Plan |
| 1. | Artificial screening for BPH | Coimbatore: Dr.K. Amudha (PBG) & Dr. R. P. Soundararajan (ENT) | Identification of Promising resistant donors |
| 2. | Artificial screening for Blast | Gudalur: Dr. D. Kumaresan (PBG) & Dr. A. Ramanathan (PAT) | Identification of Promising resistant donors |
| 3. | Natural screening for sodicity | Trichy: Dr. S. Geetha (PBG) & Dr. S. Nithila (CRP) | Identification of Promising resistant donors |
| Sub theme 2 | Developing Genetic Stocks for various traits | | |
| S.No | Activity | Name of the scientist and centre | Work plan |
| 1. | Developing genetic stocks with stem borer resistance. | Coimbatore: Dr. P. Jeyaprakash (PBG) & Dr. R. P. Soundararajan (ENT) | F ₂ s of elite lines crossed with stem borer resistant donars |
| 2. | Transfer of salinity resistance from donors viz., Nonabokra, CSR 10 and Cheriveruppu into ADT 37 | Aduthurai: Dr. D. Sassikumar (PBG) & Dr. K. Vanitha (CRP); Trichy: Dr. S. Geetha (PBG) & Dr. M. Baskar (SS&AC) | F ₂ s of ADT 37 crossed with Nonabokra, CSR 10 and Cheriveruppu. |

| Theme 2 | Evolution of extra early rice varieties | | |
|--------------|---|--|--|
| Theme Leader | Dr.R.Suresh, Assistant Professor (PBG), TRRI, Aduthurai. | | |
| S.No. | Activity | Name of the Scientist and Centre | Work Plan |
| 1. | Development of new segregating generations involving extra early donors | Madurai: Dr.P.Arunachalam , Asst. Professor (PBG) Aduthurai: Dr.R.Suresh, Asst. Professor (PBG) | Kharif 2017:Crossing Programme Newly identified extra early genotypes will be utilized as donors and crossed with widely adopted varieties. Rabi 2017:Evaluation of F₁s The F ₁ obtained from the newly identified extra early rice genotypes will be evaluated and the promising F ₁ s will be allowed for selfing and F ₂ seeds will be shared to all centres. |
| 2. | Screening segregants for early vigour for further advancement | Madurai: Dr.P.Arunachalam, Asst. Professor (PBG) Aduthurai: Dr.R.Suresh, Asst. Professor (PBG) Thanjavur: Dr. L.Subha Asst. Professor (PBG) | Aduthurai, Thanjavur and Madurai Centres Kharif 2017:Evaluation of F₂ F ₂ population developed from the promising F ₁ s at Madurai Centre will be shared to all centres and Superior single plants with high yield and earliness (<90 days) will be selected from the segregating populations and forwarded as F ₃ families. Rabi 2017:Evaluation of F₃ Superior plants with high yield and earliness (<90 days) selected from the F ₂ progenies will be raised as F ₃ families in all the centres. Superior single plants with earliness will be selected and forwarded as F ₄ families. |
| 3. | Yield evaluation under direct seeded and transplanted conditions | Madurai: Dr.P.Arunachalam, Asst. Professor (PBG) Aduthurai: Dr.R.Suresh, Asst. Professor (PBG) | Aduthurai, Thanjavur and Madurai Centres: Kharif and Rabi 2017: Initial evaluation trial: Homozygous F ₆ families identified with early duration (< 90 days) during Rabi 2016 will be evaluated at Aduthurai. |

| | | | |
|--|--|---|---|
| | | Thanjavur: Dr. L.Subha Asst. professor (PBG) | Advanced Yield Trail Evaluation of promising extra-early cultures identified from the first year AYT will be evaluated in all the centres for confirmation. |
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|--------------------|---|---|--|
| Theme 3 | Evolution of early (115 days) rice varieties | | |
| Team Leader | Dr. S. Arumugachamy, Professor & Head , RRS, Ambasamudram | | |
| Sub Theme 1 | Early duration cultivar development with fine grain/ Bold grain, BPH and Blast resistance | | |
| S. No | Activity | Name of the centre and scientists | Work Plan |
| 1. | Fine Grain type Development of new segregating generations | Aduthurai: Dr. R. Suresh (PBG), Dr. V. G. Mathirajan (Ento), Dr. R. Thilagavathi (Patho) Coimbatore: Dr. P. Jeyaprakash (PBG), Dr. R. P. Soundararajan(Ento) Dr. A. Ramanathan (Path) Madurai: Dr. N. Aananthi (PBG), Dr.V.A. Vijayashanthi (Ento), Dr. N. Revathi (Path) | <ul style="list-style-type: none"> ✓ Continuing the hybridization programme and sharing of F₁ ✓ Evaluation of shared F₁s as F₂ and F₃ and selection with an eye to replace ADT 43 and CO 51. ✓ Selection and advancement of segregating progenies in possession of each centre. ✓ Testing of forwarded entries in their respective yield trials in comparison with ADT 43, ADT 45, CO 51 (fine grain). ✓ Artificial screening of advanced cultures for BPH, Stem Borer, Blast and BB. ✓ Team evaluation of MLT and ART cultures for yield, quality & resistance. |
| 1. | Bold Grain type Development of new segregating generations | Ambasamudram: Dr. S. Arumugachamy (PBG), Dr. M. A. K. Pillai (Ento) Dr. N Rajinimala (Path), | <ul style="list-style-type: none"> ✓ Continuing the hybridization programme and sharing of F₁ ✓ Evaluation of shared F₁s as F₂ and F₃ and selection with an eye to replace ASD 16 and ADT 37. ✓ Selection and advancement of segregating progenies in possession of each centre. ✓ Testing of forwarded entries in their respective yield trials in comparison with ASD 16, ADT 37, TPS 5 (Bold |
| 2. | Testing of advanced lines | Killikulam: Dr. M. Arumugampillai(PBG) Dr. G. Ravi (Ento), | <ul style="list-style-type: none"> ✓ Testing of forwarded entries in their respective yield trials in comparison with ASD 16, ADT 37, TPS 5 (Bold |

| | | | |
|--|--|----------------------|---|
| | | Dr. R. Kannan (Path) | grain). ✓ Team evaluation of MLT and ART cultures for yield, quality & resistance. ✓ Artificial screening of advanced cultures for BPH, Stem Borer, Blast and BB. |
|--|--|----------------------|---|

| Theme 4 | | Evolution of medium duration (135 days) rice varieties | |
|--------------------|---|--|--|
| Team Leader | | Dr.D.Sassikumar, Associate Professor (PB&G) TRRI, Aduthurai | |
| Sub Theme 1 | | Medium duration cultivar development with fine grain/ High Yield with BB and blast resistance | |
| S. No. | Activity | Name of the centre and scientists | Work Plan |
| 1. | Fine Grain Development of new segregating generations involving new donors for quality, BB and Blast. | Aduthurai: Dr. D. Sassikumar (PBG), Dr. P. Akiladevi (PAT) Coimbatore: Dr. K. Amudha (PBG), Dr. R.P.Soundararajan (ENT), Dr. S. Ramanathan (PAT) | ✓ Continuing the hybridization programme and sharing of F ₁ ✓ Evaluation of shared F ₁ s as F ₂ and F ₃ and selection based on grain quality and yield ✓ Selection and advancement of segregating progenies in possession of each centre ✓ Testing of forwarded entries in their respective yield trials in comparison with popular and recently released variety as check |
| 2. | Testing of Advanced lines | Madurai Dr. R.P.Gnanamalar(PBG), Dr. V.A. Chandramani (ENT) Dr. N. Revathi (PAT) | ✓ Team evaluation of MLT and ART cultures for yield, quality & resistance. |
| 1. | Bold Grain Development of new segregating generations involving new donors for quality, BB and Blast. | Ambasamudram: Dr. A. Muthusamy (PBG), Dr. M.A.K. Pillai (ENT), Dr. N. Rajinimala (PAT) Killikulam: Dr. S. Saravanan (PBG), Dr. G. Ravi (ENT), Dr. R. Kannan (PAT) | ✓ Continuing the hybridization programme and sharing of F ₁ ✓ Evaluation of shared F ₁ s as F ₂ and F ₃ and selection based on grain quality and yield ✓ Selection and advancement of segregating progenies in possession of each centre ✓ Testing of forwarded entries in their respective yield trials in comparison with popular and recently released variety as check. |
| 2. | Testing of Advanced lines | Tirupathisaram | |

| | | | |
|--------------------|--|--|--|
| | | Dr. N. Shanmugavalli (PBG), Dr. G. Preetha (ENT), Dr. M. Jayasekhar (PAT) | ✓ Team evaluation of MLT and ART cultures for yield, quality & resistance. |
| Theme 5 | Evolution of long duration (>145 days) rice varieties | | |
| Team Leader | Dr.R.Manimaran, Assistant Professor (PB&G), TRRI, Aduthurai. | | |
| | | | |
| S. No. | Activity | Name of the centre and scientists | Work Plan |
| 1. | Development of new segregating generations for yield/quality, BB and blast | Aduthurai: Dr.R. Manimaran (PBG), Dr. K.Rajappan (PAT) Dr.V.G.Mathirajan (ENT) | Samba, 2017 ✓ Effecting new set of crosses involving new donors and Evaluation of F ₁ hybrids and F ₂ populations ✓ Evaluation of segregating generations and fixing of promising homozygous lines for testing in yield trials ✓ Conducting various yield trials viz., IYT, AYT, AICRIP and MLT to identify entries for next level of testing ✓ Screening the advanced cultures for BPH, stemborer, blast and BLB |
| 2. | Testing of advanced lines | | |

| | | | |
|--------------------|---|---|--|
| Theme 6: | Breeding for abiotic stress situation | | |
| Team Leader | Dr. S. Geetha, Professor (PB&G), ADAC&RI, Trichy | | |
| Sub theme 1 | Evolving rice cultivars tolerant to salinity/sodicity | | |
| S. No. | Activity | Name of the centre and scientists | Work Plan |
| 1. | Development of new segregating generations involving new donors for salinity/sodicity | Trichy: Dr. S. Geetha (PBG), Dr. S. Nithila (CRP), Dr. M. Baskar, (SS&AC) | Crossing work and raising F ₁ (Aduthurai) Fixing up of true hybrids with new donors and Single plant / family selection from F ₂ and F ₃ Conduct of PYT,CYT and MLT |
| 2. | Testing of advanced lines | Aduthurai D.Sassikumar (PBG) | |

| Sub theme 2 | | Evolving rice cultivars tolerant to drought Co ordinator: Dr.S.Banumathy, Associate Professor (PB&G), Madurai. | |
|--------------------|--|--|--|
| 1. | Development of new segregating generations involving new donors for drought | Madurai : Dr. S.Banuamthy (PBG) | <ul style="list-style-type: none"> ✓ Continuing the hybridization programme and sharing of F₁ ✓ Evaluation of shared F₁s as F₂ and F₃ and selection based on grain quality and yield ✓ Selection and advancement of segregating progenies in possession of each centre |
| 2. | Testing of advanced lines | Coimbatore: Dr. P. Jeyaprakash (PBG), Dr. V. Ravichandran (CRP) Paramakudi: Dr.S.Muthuramu (PBG) Tirur: Dr. A. Sheeba (PBG) | <ul style="list-style-type: none"> ✓ Testing of forwarded entries in their respective yield trials in comparison with popular and recently released variety as check ✓ Team evaluation of MLT and ART cultures for yield, quality & resistance |
| Sub theme 3 | | Evolving rice cultivars tolerant to submergence | |
| | Development of new segregating generations involving new donors Testing of advanced lines | Aduthurai: Dr. R. Manimaran (PBG), Dr. K. Vanitha (CRP), Coimbatore: Dr. K. Amudha (PBG), Dr. V. Ravichandran (CRP)] | <ul style="list-style-type: none"> ✓ Continuing the hybridization programme and sharing of F₁ ✓ Evaluation of shared F₁s as F₂ and F₃ and selection based on grain quality and yield ✓ Selection and advancement of segregating progenies in possession of each centre ✓ Testing of forwarded entries in their respective yield trials in comparison with popular and recently released variety as check ✓ Team evaluation of MLT and ART cultures for yield. |

| Theme 7: | | Hybrid rice breeding | | |
|---------------------|----------------------------|---|---|------------------------|
| Theme leader | | Dr.R. Saraswathi, Professor (PB&G), Department of Rice, CPBG, Coimbatore | | |
| S. No. | Activity | Name of the scientist & centre | Year 2017-18 | |
| | | | Kharif | Rabi |
| A. | THREE LINE BREEDING | | | |
| 1. | Developing new CMS lines | Coimbatore: Dr. R. Saraswathi (PBG) | Identification of new maintainers & effecting first backcross | Continuing backcrosses |

| | | | | |
|-----------|---|---|---|---|
| 2. | Testing the stability of new CMS lines for sterility expression | Ambasamudram: Dr. S. Arumugachamy,(PBG) Killikulam: | Multilocation evaluation for pollen & spikelet sterility, 50% flowering and other important floral traits | |
| 3. | Synthesis of new test crosses & identification of potential restorers in CMS system | Madurai: Dr. S. Banumathy (PBG) Aduthurai: Dr.R.Manimaran (PBG) | i) Seed multiplication of CMS lines for second year study ii) Synthesis of new test crosses iii) Evaluation of already synthesized crosses for fertility restoration/ sterility maintenance | |
| B. | TWO LINE BREEDING | | | |
| 1. | Developing new TGMS lines | Coimbatore: Dr. R. Saraswathi, Prof (PBG) Gudalur: Dr. D.Kumersan (PBG) | Seed multiplication of selected stubbles from S.No. ii of Rabi 2016-17 continued (GDR) | i. Raising of F ₄ families and selection at CBE ii. In those families exhibiting uniformity, sterile stubbles will be collected iii. Selection will be continued in already available unstabilised lines |
| 2. | Testing the stability of already developed new TGMS lines for sterility expression | Coimbatore: Dr. R. Saraswathi (PBG) Ambasamudram: Dr. S. Arumugachamy (PBG) Killikulam: Dr. R. Pushpam, (PBG) Madurai: Dr. S. Banumathy (PBG) Aduthurai: Dr.R.Manimaran (PBG) | Modifications and fine tuning the time of sowing to be adopted are identified in each location. | -- |

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|-----------|---|---|--|---|
| 3. | Assessment of fertility reversion percentage of selected TGMS lines at plains and hills during fertile phase | CBE: Dr. R. Saraswathi, (PBG) GDR: Dr. D. Kumaresan, (PBG) | Confirmation study of first set of lines with modifications in sowing time, if any. ii. Study repeated with a new set of TGMS lines | |
| 4. | Synthesis of new crosses & identification of potential hybrids in TGMS system | Coimbatore: Dr. R. Saraswathi (PBG) Aduthurai: Dr.R.Manimaran (PBG) | Evaluation of crosses and identification of hybrids for further promotion continued | Synthesis of new crosses continued Evaluation of already synthesized crosses |
| C. | EVALUATION OF HYBRIDS FOR GRAIN YIELD & RESISTANCE | | | |
| | Re - synthesis of heterotic crosses and Testing of hybrids in station trials for yield, quality, screening for resistance to BPH, blast, BB | Coimbatore Dr. R. Saraswathi, (PBG) Dr. A. Ramanathan, (PAT) Dr. R.P. Soundararajan,(ENT) Aduthurai Dr. R.Suresh, (PB&G) Dr. V.G.Mathirajan (ENT) Dr. Thilagavathy (PAT) | i. Mini seed production of identified combinations in CMS system ii. Testing of synthesized hybrids (both CMS & TGMS) in IYT iii. Testing of promising hybrids in AYT. iv. Screening of hybrids for their reaction to BPH, blast, BB under artificial conditions and field screening for other major diseases/pests | i. Mini seed production of identified combinations in TGMS & CMS systems ii. Quality analysis of hybrids |

| Theme 8 | | Breeding for nutritional security | |
|---|---|--|---|
| Sub Theme 1 | | Bio-fortification of Fe and Zn through molecular breeding | |
| S. No. | Activity | Name of the centre and scientists | Work Plan |
| 1. | Introgression of Fe & Zn through MAS | Dr. D. Sudhakar (CPMB) | Validation of SSRs using bi-parental mapping populations for the QTL of Fe and Zinc accumulation in rice grains |
| 2. | Genetic transformation of Fe transporter gene(s) into elite back grounds | | Genetic transformation of elite rice genotypes using genes associated with elevated Fe accumulation in grains |
| Theme 9 | | Next generation genome sequencing and bioinformatics | |
| Team Leader: Dr. J. Ramalingam, Professor and Head, DPMB&B | | | |
| S. No. | Activity | Name of the centre and scientists | Work Plan |
| 1. | Whole genome re-sequencing of native rice genotypes through Next Generation Sequencing | CPMB & B: Dr. J. Ramalingam Dr. M. Raveendran Dr. M. Jayakanthan Mrs. N. Bharathi Dr. N. Saranya | Whole Genome re-sequencing of target genotypes/genetic materials |
| 2. | Mining novel alleles (SNP) of genes for biotic/abiotic stress tolerance, nutrient use efficiency, photosynthetic efficiency, growth rate and grain quality traits | | Targeted re-sequencing/TILLING of putative candidate genes |

B. CROP MANAGEMENT

I. FOR INFORMATION

1. Screening of rice genotypes for salinity tolerance

The landraces namely *mappillai samba*, *mayurpanki*, *kattaikar*, *kadikannan* and *lunishree* were found to be tolerant and *lalmeeta*, *kavya*, *kasalath* and *kallundaikar* were found to be moderately tolerant at panicle initiation stage with a concentration of 12 dSm^{-1} under pot culture studies.

2. Nitrogen and potassium interaction studies under aerobic rice grown in sandy loam soils of Cauvery New Delta

Application of 150 kg N and 100 kg K_2O / ha was found to be optimum for obtaining higher grain yield under aerobic rice cultivation.

3. Stubble management in rice– rice cropping system

Application of 10 kg N/ ha at 15 days prior to puddling and 500 kg gypsum as basal had higher amount of $\text{NH}_4\text{-N}$ and was also found to be optimum for obtaining higher grain yield in *Thaladi* rice grown with *Kuruvai* stubbles

4. Permanent manurial experiment on rice (Madurai)

Integrated application of GLM @ 6.25 t/ ha + 100 % RDF is found to be better for obtaining higher yield (5865 kg/ha). Similarly, a positive balance of available P (11.9 to 24.9 kg /ha) and negative balance of available N (- 8 to -82 kg /ha) was noticed whereas a positive balance of available K (+8 to +45 kg/ ha) in urban compost and inorganic K and a negative balance of -12 to -31 kg /ha observed with organic source and inorganic K application. Similarly, in the case of a positive balance of organic carbon status (+ 1.1 to +4.4 g /kg) was observed in all the treatments except control.

5. Permanent manurial experiment in rice based cropping system (Aduthurai)

In Old Cauvery Delta Zone, twenty four years of continuous experiment with rice revealed that application of recommended dose of NPK with green manure @ 6.25 t/ ha during *Kuruvai* season and recommended dose of NPK with FYM @ 12.5 t/ha during *Thaladi* season had higher grain and straw yield and improved soil physico-chemical properties.

6. Permanent manurial experiment on rice-rice cropping system in acid soils (Ambasamudram)

Application of nutrients in an integrated manner especially N through INM practice significantly registered higher grain yield which was 16%, 34% and 74% more than the inorganic, organic and absolute control, respectively during *Kar* 2016 season.

7. Studying the role of methanotrophs in reducing the methane gas emission in transplanted rice ecosystem of Cauvery delta zone

Application of 75% RDF of NPK+ Azophos+ Methanotrophs showed better performance towards $\text{Mmo}'\text{S}$ activity and reduced the green house gaseous emission viz., CH_4 (4 mg/ m^2 / hr), CO_2 ($9.86 \mu \text{mol m}^{-2} \text{S}^{-1}$) and N_2O ($0.088 \mu \text{g N /m}^2$ / hr) under field level.

8. Formulation of cyanobacterial biofilm and evaluating its impact on rhizosphere dynamics of paddy

The aqueous cyanobacterial Anabaena AMP 1 biofilmed formulation @10 ml or 20 ml per 100 gram of seeds could be included as a liquid inoculant for seed treatment along the recommended treatment practices for better growth and development of paddy seedlings.

II. ON FARM TESTING

OFT 1. Mechanized semidry rice cultivation and weed management

Objectives

1. To identify yield attributes responsible for the yield gap under semi dry condition
2. To identify better weed management option under semidry condition

Treatment details

T₁ - Sowing of seeds by seed drill @ 40 kg/ha+ application of Pretilachlor@ 0.45 l/ ha on 5 DAS and two machine weeding (power weeder) on 30 & 45 DAS +AWD + RDF120:50:50 kg NPK /ha

T₂ - Farmers Practice- Sowing of seeds @100kg/ha + Pre-emergence herbicide along with two weeding

Centers

- ARS, Paramakudi : Dr.S.Sakthivel, Professor & Head
- AECRI, Kumulur : Dr.S.Vallal Kannan, AP(Agronomy)
- DARS, Chettinad : Dr.N.Satheeshkumar, AP(Agronomy)
- AC&RI, Killikulam : Dr.M.Hemalatha, Assoc. Prof.(Agronomy)

Observations to be recorded

- Plant population (Numbers/m²) at 15 DAS
- Weed flora and weed count on 25 and 40 DAS
- Number of tiller production
- Productive tillers / m²
- Number of grains per panicle
- Grain and straw yields (kg/ha)
- Economics

OFT 2. Standardization of soil medium for production of sturdy rice seedlings suitable for machine transplanting

Rationale

- Paddy seedlings raised by conventional method (Soil as a media)
- Thin and weak seedlings
- Machine picks upto 5 seedlings per pick
- Plant population per hill
- Production of sturdy seedlings through nutrient media.

Treatment details

T₁ - Media with 70% soil + 20% well decomposed FYM + 10 % rice hull + DAP @ 7 g / tray + Vermicompost @ 100 g/ tray + Azophos 14 g / tray with a seed rate of 20 kg/ha

T₂ - Control (Soil alone + Recommended seed rate 20 kg/ha)

| | | |
|--------------------|---|---|
| Lead centre | : | Dr. N.Senthilkumar, Asst. Prof (Agronomy), AC & RI, KKM |
| TRRI, Aduthurai | : | Dr. M. Raju, Associate Professor (Agronomy) |
| AC&RI, Madurai | : | Dr. E. Subramanian, AP (Agronomy) |
| AC&RI, Coimbatore | : | Dr. K. Rajendran, Professor (Agronomy) |
| ADAC&RI, Trichy | : | Dr. T. Ramesh, AP (Agronomy) |

Observation to be recorded

a. Nursery

- Seedling height
- Number of leaves per seedling
- Seedling dry matter production
- Root weight, Root volume and Root length
- Seedling vigour and Seedling girth

b. Main Field

- Initial plant population
- Number of seedlings/ hill
- Plant height (cm)
- Total number of tillers /m²
- Leaf Area Index
- Dry matter production
- Number of productive tillers /m²
- Number of filled grains per panicle
- Thousand grain weight (g)
- Grain yield (kg/ha)
- Straw yield (kg/ha)

c. Economics

OFT 3. Nitric Oxide donor based pre-sowing seed treatment for better seedling emergence and establishment in sodic soils.

Objective

To confirm the efficacy of seed soaking with nitric oxide donor in overcoming the seed germination failure and poor seedling establishment under sodic soil conditions.

Treatment details

T₁ - Control

T₂ - Seed soaking with 80µM sodium nitropruside @ 1:1 (v/v) seed: solution

Centres:

Dr.T.Eevera, Assistant Professor (SST), ADAC&RI, Trichy

Dr.Punithavathi, Assistant Professor (SST), SWMRI, Thanjavur

Dr.C.Vanitha, Assistant Professor (SST), NPRC, Vamban

Observations

- Germination, Speed of emergence, Root length, Shoot length
- Chlorophyll content, Dry matter production, Total number of leaves

III. UNIVERSITY RESEARCH PROJECT WISE REMARKS

| S.No. | Project number & title | Project Leader | Period | Remarks |
|--------------------|--|---|-----------------------|--|
| i. Agronomy | | | | |
| 1. | DCM/ PAI/ AGR/ RIC/ 2015/ 001 Pre and post emergence herbicides with mechanical weeding on weed management in direct (drum) seeded rice | Dr. C. SIVAKUMAR Asst. Professor (Agronomy) | Nov. 2015 - Oct. 2017 | To be continued |
| 2. | CAEK/ KUM/ AGR/ 2014/ 003 Influence of seed rate and water regimes on weed management and production of rice under mechanised semidry rice cultivation | Dr. S. Vallal Kannan Asst. Professor (Agronomy) | Aug. 2014 - July 2017 | OFT will be conducted with the best treatment. |
| 3. | DCM/ TRY/ AGR/ RIC/ 2015/ 001 Standardizing the agrotechniques for medium duration pre-release rice cultures | Dr. S. Avudaittai, Professor (Agronomy) | June 2015 - May 2017 | To be closed and submit the completion report |
| 4. | DCM/ KKM/ AGR/ RIC/ 2014/ 002 Standardization of soil medium for production of sturdy rice seedling suitable for machine transplanting | Dr. M. Hemalatha Asst. Professor (Agronomy) | Nov. 2014 - Dec. 2016 | OFT will be conducted with the best treatment. |
| 5. | DCM/ MDU/ AGR/ RIC/ 2014/ 003 Aerobic rice cultivation under tankfed irrigated condition | Dr. S. Anitta Fanish, Asst. Professor | Sep. 2014 - Oct. 2016 | To be closed |
| 6. | DCM/ MDU/ AGR/ RIC/ 2016/ 001 Optimisation of nitrogen fertilizer requirement for short duration pre-release rice cultures. | Dr.N.S.Venkataraman Professor and Head | Oct. 2016 - Sep. 2019 | To be continued |
| 7. | DCM/ TKM/ AGR/ RIC/ 2016/ 001 Optimisation of nitrogen fertilizer requirement for short duration pre-release rice cultures. | Dr. C. Muralidharan Professor (Agronomy) | Dec. 2016 - Nov. 2018 | To be continued |

| ii. Soil Science and Agrl. Chemistry | | | | |
|---|--|--|---------------------------|--|
| 8. | NRM/ADT/SAC/RIC/2012/001 Permanent Manurial Experiment in Rice Based Cropping System | Dr.C.Sharmila Rahale Asst. Professor (SS&AC) | April 2012- March 2017 | The results of PME will be provided as information |
| 9. | NRM/ADT/SAC/RIC/2015/002 Evolving appropriate zinc fertilization strategy for rice-rice cropping system in old Cauvery Delta Zone. | Dr.C.Sharmila Rahale Asst. Professor (SS&AC) | April 2015- March 2018 | To be continued |
| 10. | NRM/TRY/SAC/RIC/2015/001 Permanent Manurial Experiment on rice-pulse cropping sequence in sandy clay loam calcareous sodic soil (<i>Typic Ustropepts</i>) of Trichy under wetland condition. | Dr.P.Balasubramaniam Prof. & Head (SS&AC) | Sep. 2015- Aug. 2020 | To be continued |
| 11. | NRM/KUM/SAC/RIC/2015/001 Permanent Manurial Experiment on Rice in clay loam soil (<i>Vertic Ustropept</i>) of Thiruchirapalli under flood irrigation. | Dr.T.Sherene Jenita Rajammal Asst. Professor (SS &AC) | Aug. 2015-April 2020 | To be continued |
| 12. | NRM/MDU/SAC/RIC/1975/001 Permanent Manurial Experiment on Rice | Dr. P.Saravana Pandian Professor (SS&AC) | Sep.1975 | The results of PME will be provided as information |
| 13. | NRM/BSR/SAC/ RIC/2015/001 Permanent manurial experiment on rice - groundnut cropping system in red sandy loam soil of Bhavanisagar under irrigated condition. | Dr. S. Thenmozhi, Asst. Professor (SS & AC) | Feb. 2015-April 2020 | To be continued |
| 14. | 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, Professor (SS & AC) | June 2014- May 2016 | The results of PME will be provided as information |

| | | | | |
|-----------------------------|---|---|---------------------------|--|
| 15. | NRM/TNJ/SAC/RIC/2011/001 Stubble Management in rice - rice cropping system. | Dr.M.Babu, Professor (SS & AC) | June 2014- May 2016 | The results of PME will be provided as information |
| 16. | NRM/KTM/SAC/RIC/2016/001 Evaluation of organic sources under safe AWDI method in transplanted rice. | Dr.M.Babu, Professor (SS & AC) | Aug. 2016 - March 2019 | To be continued |
| 17. | 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, Professor (SS & AC) | Oct. 2015- March 2018 | To be continued |
| 18. | NRM/TPS/SAC/RIC/2015/002 Role of Zinc, Silicate solubiliser and potash mobiliser for improvement in soil fertility and yield of paddy in a vertisol of high rainfall zone | Dr. S. Suresh, Professor (SS & AC) | Oct. 2015- March 2018 | To be continued |
| 19. | NRM/ASD/SAC/RIC/2015/003 Permanent Manurial Experiment on rice-rice cropping system in acid soils of Ambasamudram | Dr.S.Jothimani, Professor (SS & AC) | June 2015- May 2020 | To be continued |
| iii. Crop Physiology | | | | |
| 20. | DCM/ADT/CRP/RIC/2014/002 Screening of rice genotypes for salinity tolerance | Dr. K. Vanitha Asst. Professor (CRP) | Nov. 2014- Oct. 2017 | To be continued |
| iv. Microbiology | | | | |
| 21. | NRM/ADT/AGM/RIC/2014/001 Studying the role of methanotrophs for reducing the methane emission in transplanted rice ecosystem of Cauvery Delta Zone | Dr. M Jeya Bharathi Asst. Professor(AGM) | Sep. 2014- Aug. 2017 | To be continued |

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|---------------------------------------|--|---|--------------------------|--|
| 22. | NRM/ADT/AGM/RIC/2016/001 Performance of microbial inoculants in low land and SRI rice | Dr. M Jeya Bharathi Assistant Professor (AGM) | Oct. 2016-Sep. 2018 | To be continued |
| 23. | NRM/MDU/AGM/RIC/2016/001 Development of multifunctional strains of <i>Azotobacter sp.</i> For enhancing Rice productivity | Dr. K Kumutha Professor & Head, | Oct. 2016-Sep. 2019 | To be continued |
| 24. | NRM/KKM/AGM/RIC/2014/002 Formulation of cyanobacterial biofilm and evaluating its impact on rhizosphere dynamics of paddy | Dr. B. Jeberlin prabina Asst. Professor (AGM) | March 2014- Feb. 2017 | To be closed and results may be provided as information. |
| 25. | NRM / CBE/ AGM/ 2015/ 004 Screening of diazotrophic <i>Clostridium</i> isolates from flooded rice ecosystem for bioinoculant development | Dr.K.G.Anitha, Asst. Professor (AGM) | July 2015- June 2018 | To be continued |
| 26. | NRM / CBE/ AGM/ RIC/ 2016/ 001 Evaluation selected of <i>Paenibacillus</i> strains for increased growth, yield and mitigation of salinity stress in Rice | Dr. N. O. Gopal, Professor (AGM) | May 2016-April 2018 | To be continued |
| 27. | NRM/KKM/AGM/RIC/2015/001 Development and evaluation of Cyanobacterial consortia for sodic rice soils | Dr.K.G.Sabarinathan, Asst. professor (AGM) | March 2015- Feb. 2018 | The project may be handed over to Dr. Sundar, Professor (AGM) and the present PI is act as Co-PI as he has been transferred to AC&RI,Killikulam. |
| 28. | TRRI/TKM/AGM/2013/001 Evaluation of temperature-tolerant <i>Azolla</i> strains suitable for Thiruvallur Dist | Dr H Gopal Professor (AGM) | Sep. 2013- May 2017 | To be closed |
| v. Seed Science and Technology | | | | |
| 29. | 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 Professor (SST) | Feb. 2015- March 2018 | To be continued |

| | | | | |
|-----|---|---|---------------------------|--|
| 30. | SEED/ADT/SST/RIC/2015/003 Study on a total package of primed rice seeds in portray method of seedlings and proper transplanting using a planter for Delta Dt | Dr. K. Sasikala Professor (SST) | April 2016- March 2019 | To be closed |
| 31. | AICRP/STR/CBE/SEP/001 Recognition of seed film coating polymers for efficient and health friendly seed treatment operations for certified seeds of cereals and legumes. | Dr.V.Vakeswaran Asst. Professor (SST) | April 2016- March 2017 | To be continued |
| 32. | SEED/CBE/SST/RIC/2016/001 Development of seed coating strategy to overcome rice seed dormancy | Dr.J.Renugadevi Professor (SST) | June 2016- May 2019 | To be continued |
| 33. | SEED/BSR/SST/RIC/2017/001 Evaluating an integrated management approach against angoumois grain moth (<i>Sitotroga cerealella</i>) infestation to improve rice seed storability. | Dr.R.Vigneshwari, Asst. Professor (SST) | Dec. 2016- Dec. 2018 | To be continued |
| 34. | 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, Asst. Professor (SST) | Oct. 2013-Sep. 2016 | OFT will be conducted with the best treatment. |
| 35. | SEED/TNJ/RIC/2015/001 Strategies to induce seed dormancy to mitigate pre harvest sprouting in rice variety ADT 43 | Dr.N.Punithavathi, Asst. Professor (SST) | Jan. 2015-Dec. 2017 | To be continued |

IV. ACTION PLAN (FOR 2017-18 and 2018-19)

| S.No. | Project number | Title of the project |
|--------------|-------------------------------|--|
| 1. | DCM/ ADT/ AGR/ RIC/ 2016/ 001 | Comparative performance of different crop establishment methods for Rice – Rice – Black gram cropping system |
| 2. | DCM/ADT/ AGR/RIC / 2016/002 | Alternate cropping system for Cauvery Delta Zone |
| 3. | DCM/PMK/AGR/RIC/ 2016/001 | Traditional rice cultivation through organics under rainfed ecosystem |
| 4. | NRM/ CBE/SAC/ RIC/ 2016/001 | Screening short duration rice genotypes for high grain Zn enrichment through mineral Zn fertilization |
| 5. | NRM/TRY/SAC/RIC/2016/001 | Development of technology for improving the productivity in Sodic Soil under water scarce condition. |
| 6. | DCM/ CBE/ CRP/ RIC/ 2016/001 | Improvement of grain filling in rice by foliar spray of nutrients and growth promoters |
| 7. | - | Evaluation of zinc solubilizing bacteria for Zn fertilization and fortification of rice |
| 8. | SEED/CBE/SST/RIC/2016/001 | Development of seed coating strategy to overcome rice seed dormancy |

C. CROP PROTECTION

I. GENERAL RECOMMENDATION

i. Agricultural Entomology

- All scientists are instructed to monitor insect pests of rice in their districts constantly and send regular monthly pest surveillance report to the Directorate.

II. ACTION PLAN ON THE IDENTIFIED THEMES

i. Agricultural Entomology

Action Plan 1. Prediction of changing insect pest scenario

| Theme leader: Dr. V.G.Mathirajan, TRRI, Aduthurai. | | | | | |
|--|--|--|--|--|---|
| Activity | Name of the Scientist and Centre | Year 2016-17 | Year 2017-18 | Year 2018-19 | Deliverables/ expected outcome |
| 1. Keeping vigilance on emerging pests either through introduction or shift in pest status. | Dr.R.P.Soundararajan TNAU, CBE | Unusual upsurge of blackbug in CDZ. | Keeping vigilance on changing pest - Mite complex, Panicle Thrips. | Continuing the vigilance on changing pest scenario. | Forewarning on emerging pests. |
| 2. Assessment of insect pest and natural enemies population <i>in situ</i> , light and pheromone trap. | Dr. G.Preetha, RRS, TPS Dr.R.Nalini, SWMRI, TNJ | Agro advisory service through mass media. Regular assessment of major insect pests. | Routine monitoring on key pests & their natural enemies. | Key pest monitoring. Exploring biotic & abiotic factors to predict the pest population. | Intervention with suitable IPM package. |
| 3. Impact of light trap on non target arthropods. | Dr. M.A.K. Pillai, RRS, ASD Dr.K.Elanchezhyan, AC & RI, KKM Dr.V.A.Vijayasanthi, AC & RI, MDU Dr. Sheela Venugopal, ARS, BSR Dr. Sheeba Joyce Roseleen, AC & RI, TRY | < EIL. Natural enemies & other non-targets in light trap. | Measuring the proportion of target and non-targeted arthropods in light traps. | | |

Action Plan 2. Ecological engineering approaches for rice pest management

| Theme leader: Dr. N. Muthukrishnan, TNAU, Coimbatore. | | | | | |
|--|--|--|---|---|---|
| Activity | Name of the Scientist and Centre | Year 2016-17 | Year 2017-18 | Year 2018-19 | Deliverables/ expected outcome |
| 1. Evaluation of rice–non rice cropping systems for enhancing natural enemies. 2. Effect of organic amendments and bio fertilizers 3. Integration of effective components. | Dr.V.G.Mathirajan TRRI, Aduthurai Dr.R.Nalini SWMRI, TNJ Dr.G. Ravi AC & RI, KKM Dr.V.A.Vijayasanthi AC & RI, MDU | Conducted experiments to choose non-rice bund crops at CBE & ADT. Sunflower, sesame & cowpea-effective | Identifying suitable bund crops- Sunflower, sesame, cowpea, bhendi, brinjal, maize, sorghum, chrysanthemum & vetiver at 5 locations. Selection of organic amendments and biofertilizers at 5 locations. | Integration of effective components from 2 experiments. | Economical ecological engineering module for organic rice cultivation |

Action Plan 3. Exploring insect resistance mechanism

| Theme leader: Dr.R.P. Soundararajan, TNAU, Coimbatore. | | | | | |
|---|--|--------------------------------|--|---|--|
| Activity | Name of the Scientist and Centre | Year 2016-17 | Year 2017-18 | Year 2018-19 | Deliverables/ expected out come |
| 1. Identification of resistance sources for major arthropods. 2. Investigation of resistance mechanism | Dr.V.G.Mathirajan, TRRI, Aduthurai Dr. G.Preetha RRS, TPS Dr.R.Nalani SWMRI, TNJ Dr. M.A.K. Pillai RRS, ASD Dr.G. Ravi AC & RI, KKM Dr.V.A.Vijayasanthi AC & RI, MDU Dr.Sheela Venugopal ARS, BSR Dr. Sheeba AC & RI, TRY Dr. P. Thilagam RRS, Paiyur | Screened pre-release cultures. | Consolidating the resistant sources and test verifying at multi locations for major pests. | Investigating bio-physical and biochemical bases of resistance. | Availability of best resistant donor for breeding programme. |

Action Plan 4. Tritrophic interaction for rice pest management

| Theme leader: Dr. R. Nalini, SWMRI, Thanjavur. | | | | | |
|---|---|-----------------------------|-------------------------------|-------------------------------|--|
| Activity | Name of the Scientist and Centre | Year 2017-18 | Year 2018-19 | Year 2019-20 | Deliverables/ expected out come |
| Identification of chemical mediated attractant to | Dr.N. Muthukrishnan TNAU, CBE | Identification of volatiles | Evaluation of volatiles under | Characterization of volatiles | Availability of suitable chemical |

| | | | | | |
|--|---|--|---|-----------------|--|
| enhance the natural enemies of SB & LF | Dr. V.A.Vijayasanthi AC & RI, MDU DR.V.G.Mathirajan, TRRI, ADT | attracting natural enemies (SWMRI, TNJ, ADT) | laboratory condition (TNJ, MDU, CBE, ADT) | (TNJ, MDU, CBE) | attractant to enhance the biological control |
|--|---|--|---|-----------------|--|

ii. Plant Pathology

Action Plan 1: Pest and disease surveillance and forecasting

| Theme leader: Dr. K. Rajappan, TRRI, Aduthurai. | | | | | |
|---|---|---|--|--|---|
| Activity | Name of the Scientist and Centre | Year 2016-17 | Year 2017-18 | Year 2018-19 | Deliverables/ expected out come |
| Monitoring of diseases under irrigated and direct sown rice Blast, sheath blight, sheath rot, bacterial blight, brown spot, grain discolouration and false smut | Dr. R. Rajinimala RRS, ASD Dr. A. Ramanathan Dept. of Rice, CBE Dr. N. Revathy AC&RI, Madurai Dr. L. Karthiba ADAC&RI, TRY Dr. P. Jeyasekar ARS, TPS Dr. R. Akila AC&RI, KKM | Sheath blight was observed to an extend of 33% in Madurai. The weather conditions (RH, night temp and RF) favoured the occurrence of blast disease alone which was observed during the survey programme | Continuation of monitoring the occurrence of diseases , assessing the extend of severity | Continuation of monitoring the occurrence of diseases , assessing the extend of severity | Disease forewarning to farmers through AIR, KVK and RMC |

Action Plan 2: Studies on epidemiology of rice diseases

| Theme leader: Dr. K. Rajappan, TRRI, Aduthurai | | | | | |
|---|--|--|------------------------------------|------------------------------------|--|
| Activity | Name of the Scientist and Centre | Year 2016-17 | Year 2017-18 | Year 2018-19 | Deliverables/ expected out come |
| Epidemiology of rice diseases Blast, sheath blight, sheath rot, bacterial blight, brown | Dr. R. Rajinimala RRS, ASD Dr. A. Ramanathan | High RH, Low temp, moderate wind velocity favoured | Recording of disease incidence and | Recording of disease incidence and | Prediction of disease outbreak and forewarning |

| | | | | | |
|---|---|------------------------------|-------------------------------------|-------------------------------------|--|
| spot, grain discolouration and false smut | Dept. of Rice, CBE Dr. N. Revathy AC&RI, Madurai Dr. L. Karthiba ADAC&RI, TRY Dr. P. Jeyasekar ARS, TPS Dr. R. Akila AC&RI, KKM | the occurrence of false smut | correlating with weather parameters | correlating with weather parameters | |
|---|---|------------------------------|-------------------------------------|-------------------------------------|--|

Action Plan 3: Identification of resistant sources for pests and diseases

| Theme leader: Dr. K. Rajappan, TRRI, Aduthurai | | | | | |
|--|---|--|--|--|---|
| Activity | Name of the Scientist and Centre | Year 2016-17 | Year 2017-18 | Year 2018-19 | Deliverables/ expected outcome |
| Identification of resistant sources for diseases and pests Blast, sheath blight, sheath rot, bacterial blight, brown spot, grain discolouration and false smut + pests | Dr. R. Rajinimala RRS, ASD Dr. A. Ramanathan Dept. of Rice, CBE Dr. N. Revathy AC&RI, Madurai Dr. L. Karthiba ADAC&RI, TRY Dr. P. Jeyasekar ARS, TPS Dr. R. Akila AC&RI, KKM + Entomologists (All centres) | Multiple resistance under field / artificial conditions AD 12228 (SHR, RTD, stem borer) AD 12205 (SHB, stem borer) TR 13083 (BL, SHB, stem borer) TR 13069 (SHB, stem borer) CB 14533 (BL, SHB, stem borer) AS 12006 (SHR, stem borer) TP 09156 (SHB, SHR, RTD, stem borer). | Identification of resistant sources to diseases both under natural and artificial conditions | Confirmation of resistant sources to diseases and insects both under natural and artificial conditions | Resistant donors for breeding programme |

Action Plan 4: Studies on mechanism of resistance

| Theme leader: Dr. K. Rajappan, TRRI, Aduthurai | | | | | |
|---|---|---|---|--------------------------------------|---|
| Activity | Name of the Scientist and Centre | Year 2016-17 | Year 2017-18 | Year 2018-19 | Deliverables/ expected out come |
| Studies on mechanism of resistance to Blast, sheath blight, sheath rot, bacterial blight, brown spot, grain discolouration and false smut | Dr. R. Rajinimala RRS, ASD Dr. A. Ramanathan Dept. of Rice, CBE Dr. N. Revathy AC&RI, Madurai Dr. L. Karthiba ADAC&RI, TRY Dr. P. Jeyasekar ARS, TPS Dr. R. Akila AC&RI, KKM | Induction of PR-proteins, enzymes and phenolics were observed in rice cultures inoculated with blast pathogen and sprayed with hormones | The mechanism of resistance of BLB (ADT), SHR (TRY & MDU), SHB (ASD), Blast (CBE), Brown spot (KKM) | Confirmation of resistance mechanism | The identified resistant cultures will be transferred to the breeders |

Action Plan 5: Management of rice diseases through eco-friendly approaches

| Theme leader: Dr. K. Rajappan, TRRI, Aduthurai. | | | | | |
|--|--|---|---|---|---|
| Activity | Name of the Scientist and Centre | Year 2016-17 | Year 2017-18 | Year 2018-19 | Deliverables/ expected out come |
| Evaluating the new strategies for the management of rice diseases Blast, sheath blight, sheath rot, bacterial blight, brown spot, grain discolouration and false smut | Dr. R. Rajinimala RRS, ASD Dr. A. Ramanathan Dept. of Rice, CBE Dr. N. Revathy AC&RI, Madurai | Yeast was found to suppress rice bacterial blight pathogen under <i>in vitro</i> conditions at Coimbatore | Identification and mass multiplication of Yeast at Coimbatore Field testing of the Yeast along with other bio- | Confirmation of field efficacy of the Yeast | Suitable bio-agents for rice disease management |

| | | | | | |
|--|---|--|---|--|--|
| | Dr. L. Karthiba ADAC&RI, TRY Dr. P. Jeyasekar ARS, TPS Dr. R. Akila AC&RI, KKM | | agents against BLB (ADT), SHR (TRY & MDU), SHB (ASD), Blast (CBE), Brown spot (KKM) | | |
|--|---|--|---|--|--|

iii. Plant Nematology

| Action: Dr. N. Swarnakumari, Asst. Professor (Nematology) | | | |
|--|---|---|---|
| Thrust Area | 2016-17 | 2017-18 | 2019-20 |
| Identification of resistant sources – Nematodes | Screening of rice genotypes against <i>M. graminicola</i> was completed. | Screening of TNAU entries will be carried out against <i>M. graminicola</i> . | Screening TNAU entries will be carried out against <i>M. graminicola</i> . |
| Management of rice root knot nematode, <i>M. graminicola</i> | <ul style="list-style-type: none"> • Preliminary trial under glasshouse condition completed. • <i>P. chlamydosporia</i> significantly reduced <i>M. graminicola</i> population. | <ul style="list-style-type: none"> • Conducting field trial with bioagents in the infested field. • Optimization dose, time and method of application of <i>P. chlamydosporia</i> | <ul style="list-style-type: none"> • Conducting confirmation trial in field. • Endophytic nature and colonization of eggmass inside the root will be studied. |

III. UNIVERSITY RESEARCH PROJECT WISE REMARKS

i. Agricultural Entomology

| S.No. | Project No. and Title | Project leader and location | Period | Remarks |
|-------|--|---|--------------------------------|---|
| 1. | CPPS/ADT/ENT/RIC/2011/002 Development of Tolerant / Resistant rice genotypes against yellow stem borer. | Dr.S.Suresh Professor (Agrl. Ento.) TRRI, Aduthurai. | November 2013 to October 2017 | <ul style="list-style-type: none"> • Completion report to be submitted in time. |
| 2. | 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 Professor (Agrl. Ento.) TRRI, Aduthurai. | November 2013 to October 2017 | |
| 3. | CPPS/ADT/ENT/RIC/2015/004. Optimization of time of release and conservation of <i>Trichogramma japonicum</i> and <i>Trichogramma chilonis</i> for robust management of yellow stem borer and leaffolder in rice ecosystem. | Dr.V.G. Mathirajan Asst. Professor (Agrl. Ento.) TRRI, Aduthurai. | August 2015 to July 2018 | <ul style="list-style-type: none"> • The time of release along with number of parasitoids required for the management of stem borer may be test verified in different rice ecosystem. • Project to be continued |
| 4. | CPPS/CBE/DOR/ENT/RIC/2016/001/295: Standardization of artificial screening and identification of resistant sources for yellow stem borer, <i>Scirpophaga incertulas</i> in rice. | R.P.Soundararajan Asst. Professor (Agrl. Ento.) Dept. of Rice, TNAU, Coimbatore. | October 2016 to September 2019 | <ul style="list-style-type: none"> • The stem borer rearing to be taken up in the susceptible variety Pusa basmati • Project to be continued. |
| 5. | CPPS/CBE/ AEN /2013 /048 Developing nano matrices to regulate the release of pheromone to monitor Yellow stem borer, <i>Scirpophaga incertulas</i> in Rice | Dr. M. Kannan Asst. Professor (Agrl. Ento.) Dept. of Nano Sci. & Tech. TNAU, Coimbatore. | November 2013 to October 2016 | <ul style="list-style-type: none"> • On farm testing of the technology to be taken up. |

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|-----|---|---|--------------------------------|---|
| 6. | CPPS/CBE/ENT/RIC/2016/001 Developing ecological engineering methods for enhancing rice entomophages and pest management under zero insecticide condition | Dr.N.Muthukrishnan Professor (Agrl. Ento.) Dept. of Agrl. Entomology TNAU, Coimbatore. | June 2016 to May 2019 | <ul style="list-style-type: none"> • Suitable bund crop may be identified and tested. • Influence of vettiver on insect pest may be studied. • Project to be continued |
| 7. | CPPS/ASD/ENT/ PAT/RIC/2014/002 Screening and evaluation of advanced and pre-release rice cultures against major pests and diseases in Thamirabarani tract | Dr. M. Ariavanamkatha Pillai Professor (Agrl. Ento.) Dr. N.Rajinimala Asst. Professor (Plant Patho.) Rice Research Station Ambasamudram | July 2014 to June 2017 | <ul style="list-style-type: none"> • Identify the mechanism of resistance: The study may be taken up on each one resistant / moderately resistant / susceptible variety. • Project may be completed and new project to be proposed. |
| 8. | CPPS/BSR/ENT/RIC/2016/001 Evaluation of eco-friendly methods against rice yellow stem borer. | Dr. Sheela Venugopal Asst. Professor (Agrl. Entomology), Agricultural Research Station, Bhavanisagar | September 2016 to August 2017 | <ul style="list-style-type: none"> • Focus should be given to the egg parasitoids of stem borers. • Project should be proposed for the period of three years. |
| 9. | 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.Elanchezhyan Asst. Prof. (Agrl. Ento.) Mrs. Kavitha Pushpam Asst. Professor (Biochem.) Dept. of Agrl. Entomology AC & RI, Killikulam. | December 2014 to November 2017 | <ul style="list-style-type: none"> • Identity major stem borer species and develop management technology. • Project to be continued. |
| 10. | ACMDU/ MDU/AEN /2014/ 008 Effect of foliar spraying of silicic and salicylic acids on inducing resistance against major insect pests of rice | Dr. P. Chandramani Professor (Agrl. Ento.) Dept. of Agrl. Entomology AC & RI, Madurai | September 2014 to August 2017 | <ul style="list-style-type: none"> • Identify new project leader. • Completion report may be submitted in time. • New project may be proposed. |

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|-----|---|---|-------------------------------|---|
| 11. | DRES/ PAI/AEN/2013/002 Evaluation of the rice varieties and land races against paddy leaf mite (<i>Oligonychus oryzae</i>) | Dr.P.Thilagam Asst. Professor (Agrl. Ento.) Regional Research Station Paiyur | November 2013 – October 2015 | <ul style="list-style-type: none"> Project completion report to be submitted without any delay. |
| 12. | CPPS/TNJ/ENT/RIC/2016/001 Exploring rice stem borer diversity, plant resistance sources and its management through habitat diversification in Thanjavur belt. | R.Nalini Professor (Agrl. Ento.) SWAMRI, Thanjavur | June 2016 - May 2019 | <ul style="list-style-type: none"> Intensify the work on habitat diversification aspect. Initiate volatile profile studies. Project to be continued |
| 13. | CPPS/TNJ/ENT/RIC/2017/001 Pest management strategies for the changing rice pest scenario in Kanyakumari District | Dr.G.Preetha Asst. Professor (Agrl. Ento.) Agricultural Research Station Thirupathisaram | October 2016 - September 2019 | <ul style="list-style-type: none"> Species complex of stem borer to be studied along with natural enemies. Project to be continued and obtain the URP number. |
| 14. | CPPS/KKM/ENT/RIC/2016/New Studies on ecological engineering aspects of rice pest management in Tamirabarani river basin | Dr.G.Ravi Professor (Agrl. Ento.) Dept. of Agrl. Entomology AC & RI, Killikulam. | - | <ul style="list-style-type: none"> Revised project proposal based on the RPAC recommendations to be get approved as early as possible. |

ii. Plant Pathology

| S.No. | Project No. and Title | Project leader and location | Period | Remarks |
|-------|---|--|------------------------------|---|
| 1. | AICRP/PBG/ADT/RIC/002 All India Co-ordinated Rice Improvement | Dr.K. Rajappan Professor (PP) TRRI, Aduthurai | Continuous Programme | <ul style="list-style-type: none"> Apart from the AICRIP work one University Research Sub Project may be proposed. |
| 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 Asst. Professor (PP) TRRI, Aduthurai | September 2014 – August 2017 | <ul style="list-style-type: none"> Confirmation of complete identity of the consortia organisms needed. The cultures should be |

| | | | | |
|----|--|---|--|---|
| | | | | <p>deposited at MTCC / ITCC for getting accession numbers.</p> <ul style="list-style-type: none"> Reference culture should be submitted along with passport data for long term preservation at Dept. of Plant Pathology, TNAU, Coimbatore. |
| 3. | <p>CPPS/ADT/PAT/RIC/2015/005 Exploring <i>Bacillus</i> sp. for the control of bacterial leaf blight of rice caused by <i>Xanthomonas oryzae</i> pv. <i>oryzae</i></p> | <p>Dr.R. Thilagavathi Asst. Professor (PP) TRRI, Aduthurai</p> | <p>July 2015 – June 2018</p> | <ul style="list-style-type: none"> Characterization of <i>Bacillus</i> sp. upto species level and submission of culture with IDA recognized culture collection centre (MTCC / ITCC). A reference culture needs to be submitted along with passport data for long term conservation at Dept. of Plant Pathology, TNAU, Coimbatore. Confirmation of complete. |
| 4. | <p>CPPS/ADT/PAT/RIC/2014/002 Evaluation of endophytic bio-control agents against sheath rot of rice</p> | <p>Dr.P. Ahila Devi Asst. Professor (PP) TRRI, Aduthurai</p> | <p>October 2014 – September 2017</p> | <ul style="list-style-type: none"> Culture up to species level should be identified The culture should be deposited with IDA recognized culture collection centre (MTCC / ITCC) and accession number to be obtained. Reference culture to be |

| | | | | |
|----|--|---|--------------------------------------|--|
| | | | | <p>deposited at Dept. of Plant Pathology, TNAU, Coimbatore</p> <ul style="list-style-type: none"> • Glass House / Field trials are to be done with standard check |
| 5. | <p>CPPS/ADT/PAT/RIC/2014/003 Exploring the possibilities of using rhizosphere inhabiting <i>Streptomyces</i> sp for the management of Brown leaf spot of rice</p> | <p>Dr.P. Ahila Devi Asst. Professor (PP) TRRI, Aduthurai</p> | <p>October 2014 – September 2017</p> | <ul style="list-style-type: none"> • The survival of <i>Streptomyces</i> sp (isolated from Rhizosphere) on phylloplains needs to be checked. • Perfect identification of the actinomycetes and deposition of culture with MTCC / ITCC and TNAU main should be carried out. • It is suggested to check the secondary metabolites production for antifungal / growth promoting metabolites and newer formulations may be developed. • Delivery of actino bacterial cells on phylloplane needs to be scientifically validated |
| 6. | <p>CPPS/ASD/PAT/RIC/2013/001 Management of rice blast using chemical fungicides and bio-pesticides</p> | <p>Dr.N. Rajinimala, Asst. Professor (PP) RRS, Ambasamudram</p> | <p>June 2014 – May 2017</p> | <ul style="list-style-type: none"> • The project may be closed and a new project may be proposed |

| | | | | |
|-----|---|--|----------------------------------|--|
| 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, Professor (Ento.) & Dr.N.Rajinimala, Asst. Professor (PP) RRS, Ambasamudram | July 2014 – June 2017 | <ul style="list-style-type: none"> • The resistant cultures identified under field condition should be tested under artificial inoculation conditions. • Completion report before August, 2017 |
| 8. | AICRP/PBG/CBE/RIC/003 Screening and identification of disease resistant donors and development of effective management practices for major epidemic disease of rice. | Dr.A. Ramanathan, Professor (PP) Dept. of Pl. Pathology Coimbatore | Continuous Programme | <ul style="list-style-type: none"> • Apart from the AICRIP work one University Research Sub Project may be proposed |
| 9. | CPPS/CBE/PAT/RIC/2016/001 Assessing the occurrence and distribution of mycotoxins in rice. | Dr. M. Karthikeyan Asst. Professor (PP) Dept. of Pl. Pathology Coimbatore. | February 2016 - January 2019 | <ul style="list-style-type: none"> • Samples should be drawn from the Go-down as well • Moisture content of the samples should be assessed |
| 10. | CPPS/KKM/PAT/RIC/2015/001 Management of major fungal diseases of rice in Tamirabarani tract of Tuticorin District (2015-2016) | Dr. R. Akila Asst. Professor (PP) AC & RI, Killikulam | February 2015 – February 2018 | <ul style="list-style-type: none"> • Anti-fungal compounds from Kodukapuli and Henna should be purified. • The effectiveness of the purified compounds should be tested against brown spot pathogen. |
| 11. | CPPS/MDU/PAT/RIC/2014/001 Innovative approaches for the management of bacterial leaf blight and bacterial leaf streak diseases of rice using antagonist and chemical. | Dr.S. Thiruvudainambi Professor (PP) AC & RI, Madurai | April 2014 – March 2017 | <ul style="list-style-type: none"> • The project may be closed and a new project may be proposed |

| | | | | |
|-----|--|--|----------------------------------|--|
| 12. | CPPS/MDU/PAT/RIC/2014/002 Identification of resistant genotypes against major diseases of rice | Dr. N. Revathy Assoc. Professor (PP) AC & RI, Madurai | May 2014 – April 2017 | <ul style="list-style-type: none"> The project may be closed and a new project may be proposed |
| 13. | CPPS/TRY/PAT/RIC/2014/001 Identification of sources of resistance in rice to major pests and diseases under salt stress conditions | Dr. K. Chitra, Asst. Professor (PP) Dr. S. Sheeba Joyce Roseleen, Asst. Professor (Ento.) AC & RI, Trichy | October 2014 – September 2017 | <ul style="list-style-type: none"> The resistant cultures identified under field condition should be tested under artificial inoculation conditions. |
| 14. | 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, Asst. Professor (PP) Dr. S. Sheeba Joyce Roseleen, Asst. Professor (Ento.) AC & RI, Trichy | April 2015 - March 2018 | <ul style="list-style-type: none"> Endophytic bacteria should be identified up to species level. The culture should be deposited with IDA recognized culture collection centre (MTCC / ITCC) and accession number to be obtained. Reference culture to be deposited at Dept. of Plant Pathology, TNAU, Coimbatore |
| 15. | CPPS/TPS/PAT/RIC/2015/001 Screening of rice cultures to major diseases and management of sheath rot and grain discolouration | Dr. M. Jayasekhar, Professor (PP) ARS, Tirupathisaram | September 2015 - August 2018 | <ul style="list-style-type: none"> The number of treatments may be reduced. The project may be continued. |

THEME WISE WORK LOAD OF RICE SCIENTISTS

I. Crop Improvement

TRRI, Aduthurai

| Scientist | Titles | Theme | | | | | | | | | | | | | % time |
|--|---|----------|--|-----|-----|-------------------------|-----|-----|----------------------------------|-----|-----|-----------|-----|-----|--------|
| | | | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | |
| Dr.D.Sassikumar Associate Professor (PBG) | | | | | | | | | | | | | | | |
| URP | CPBG/ADT/PBG/RIC/2012/004 | 4a | Kuruvai trial | | | | | | | | | Reporting | | 10 | |
| | CPBG/ADT/PBG/RIC/2015/ 012 | 4a | | | | | | | Thaladi trial | | | Reporting | | 25 | |
| | CPBG/ADT/PBG/RIC/2016/New : Breeder seed production | 10 | ADT 43, ADT(R) 47 | | | | | | ADT 49, ADT 50 and CR 1009 sub 1 | | | | | 25 | |
| AICRP | AICRP/PBG/ADT/RIC/002 : AICRP on Rice | | Kuruvai trials | | | | | | Thaladi trials | | | Reporting | | 15 | |
| EFP | Product testing – 2 companies | | | | | | | | Thaladi trials | | | | | 10 | |
| Teaching | Student Guidance- 3M.Sc&1PH.D as member | | <-----PG guidance-----> | | | | | | | | | | | | 10 |
| Others | Report compilation | | Compilation of Monthly report, AICRP and CSM reports | | | | | | | | | | | | 5 |
| Dr.R.Manimaran Assistant Professor (PBG) | | | | | | | | | | | | | | | |
| URP | CPBG/ADT/PBG/RIC/2015/010 : | | <-----Kharif trials-----> | | | | | | | | | | | 20 | |
| | CPBG/ADT/PBG/RIC/2014/008 | 5a, 6c | | | | <-----Rabi trials-----> | | | | | | Reporting | | 20 | |
| | Hybrid Rice –New | 7c | <-Kharif trials-----> | | | <--Rabi trials-> | | | Reporting | | | 20 | | | |
| Others | Farm Management | | <----- Farm Management-----> | | | | | | | | | | | | 20 |
| | Conduct of OFT | | <----- Conduct of OFT & Reporting -----> | | | | | | | | | | | | 20 |
| Dr.R.Suresh, Assistant Professor | | | | | | | | | | | | | | | |
| URP | CPBG/ADT/PBG/RIC/2014/009 | 2a,b,c&3 | <-----Kharif trials-----> | | | | | | Summer Trials, Reporting | | | | | 20 | |
| | CPBG/ADT/PBG/RIC/2012/005 | 10 | | | | | | | <-----Rabi trials-----> | | | Reporting | | 10 | |
| AICRP | AICRP/PBG/ADT/RIC/002 : AICRP on Rice | | <-----Kharif trials-----> | | | | | | <--Rabi trials-> | | | Reporting | | 20 | |
| EFP | DBT/CPMB/CBE/DPB/2016/R020: | | | | | | | | | | | | | | 10 |
| Others | Farm Management | | <----- Farm Management-----> | | | | | | | | | | | | 20 |
| | In charge of MAS Lab and Tissue Lab | | <-----MAS Lab and Tissue Lab work -----> | | | | | | | | | | | | 10 |

| Scientist | Titles | Theme | | | | | | | | | | | | | % time |
|-------------|-----------------------------------|-------|--|-----|-----|-----|-------------------|-----|---------------------------|-----------|-----|-----|-----|-----|--------|
| | | | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | |
| Dr.R.Pushpa | | | | | | | | | | | | | | | |
| URP | CPBG/ADT/PBG/RIC/2015/ 011 | | <-----Kharif trials-----> | | | | <--Rabi trials--> | | | Reporting | | | 20 | | |
| | CPBG/ADT/PBG/RIC/2014/010: | | <-----Kharif trials-----> | | | | <--Rabi trials--> | | | Reporting | | | 20 | | |
| AICRP | AICRP/PBG/ADT/JUT/001 :AINPJAF | | <-----Kharif trials-----> | | | | | | Summer Trials & Reporting | | | | | 30 | |
| Others | MLT/ART seed packing and dispatch | | <-----Seed packing , dispatch ,Collecting results & Reporting -----> | | | | | | | | | | | | 15 |
| | MLT/ART quality analysis | | <----- MLT/ART seeds quality analysis & Reporting -----> | | | | | | | | | | | | 15 |

Department of Rice, Coimbatore

| Scientists | Titles | Theme | | | | | | | | | | | | | % time |
|---|---|-------|--|-----|-----|-----|---|-----|-----|-----|-----|-----|-----|-----|--------|
| | | | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | |
| Dr.P.Jeyaprakash, Professor (PBG) and Head, Department of Rice,Coimbatore | | | | | | | | | | | | | | | |
| URP | CPBG/CBE/PBG/RIC/2016/005 | 3a,1b | Kharif–Short duration trials | | | | Rabi - MLT II evaluation, Evaluation of segregating progenies(F ₂ -F ₆) and seed multiplication MLT, ART, AICRIP nominations and promoted cultures | | | | | 15 | | | |
| | CPBG/CBE/PBG/RIC/2016/006 | | Maintenance breeding and BSP in short duration | | | | Maintenance breeding and breeder seed multiplication of medium and long duration rice varieties | | | | | 10 | | | |
| AICRP | AICRP/PBG/CBE/RIC/New | | <-Kharif trials-----> -> Early, mid early, biofortification, aerobic trials , FLD | | | | Production oriented survey, Reporting & Meeting | | | | | 15 | | | |
| EFP | ICAR/CPBG/CBE/RIC/R 012- Biofortification | | <-Kharif trials-----> | | | | <-----Rabi trials & reporting-----> | | | | | 10 | | | |
| | DBT/CPBG/CBE/RIC/2013/R013- N 22 | | <-Kharif trials-----> | | | | <-----Rabi trials & reporting-----> | | | | | 10 | | | |
| | DBT/CPBG/CBE/RIC/2015/R014- MAS, STRASA | | <-Kharif trials-----> | | | | <-----Rabi trials & reporting-----> | | | | | 10 | | | |
| Teaching | GPB 605(2+1), GPB 607(2+1), | | <-----Teaching and Guidance-----> | | | | | | | | | | | | 15 |

| Scientists | Titles | Theme | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | % time |
|--|--|--------|--|-----|-----|-----|-----|-----|---|-----|-----------|-----|-----|-----|--------|
| | | | | | | | | | | | | | | | |
| | PG.Ph.D Students, | | | | | | | | | | | | | | |
| Others | P&H, Dept. of Rice, COE (Molecular breeding) | | <-----Administration-----> | | | | | | | | | | | | 15 |
| Dr.R.Saraswathi, Professor (PBG) Dept. of Rice | | | | | | | | | | | | | | | |
| URP | CPBG/CBE/PBG/RIC/2016/003 | 8a | Back cross nursery, maintainer and restorer breeding & Reporting | | | | | | | | | | | | 10 |
| | CPBG/CBE/PBG/RIC/2016/004 | 8a, 8c | Kharif – New Three line Hybrid synthesis, evaluation, seed production of Expl. Hybrids for yield testing | | | | | | Rabi - seed production of Expl. Hybrids for yield testing, quality test & Reporting | | | | | | 20 |
| | CPBG/CBE/PBG/RIC/2017/001 | 8b,8c | Kharif – hybrid evaluation | | | | | | Rabi – Two line Hybrid synthesis, seed production of Expl. Hybrids for yield testing, quality test , reporting | | | | | | 20 |
| | CPBG/CBE/PBG/RIC/2017/New | | Nucleus /breeder seed production of R and A lines of released hybrids, seed multiplication of A,B, R lines of experimental /pipeline hybrids, seed multiplication of MLT/ART hybrids | | | | | | | | | | | | 10 |
| AICRP | AICRP/PBG/CBE/RIC/New | | <-Kharif trials-----> IHRT-Early, IHRT-mid early, medium ,medium slender, MLT on released hybrids and FLD | | | | | | Production oriented survey Reporting & Meeting | | | | | | 10 |
| EFP | ICAR/CPBG/CBE/RIC/2015/ R010 | | <-Kharif trials-----> | | | | | | <-Rabi trials-> | | Reporting | | | | 10 |
| Teaching | GPB. 602 (3+1) and PGR.610 (1+1) | | <-----PG guidance-----> | | | | | | | | | | | | 10 |
| Others | Farm Superintendent | | <-----Administration -----> | | | | | | | | | | | | 10 |
| Dr.K.Amudha, Assistant Professor (PBG) Dept. of Rice | | | | | | | | | | | | | | | |
| URP | CPBG/CBE/PBG/RIC/2016/001 | 1a | Characterization of 250germplasm accessions for morphological, yield and yield components | | | | | | Screening of germplasm accessions against BPH and reporting | | | | | | 15 |
| | CPBG/CBE/PBG/RIC/2016/002 | 4a,4b | Kharif – Hybridization & Evaluation of F ₁ s | | | | | | Rabi - Exhibition plot,Yield trials, MLT III and IV evaluation, Evaluation of segregating progenies(F ₂ -F ₆) and seed multiplication MLT, ART, AICRIP nominations and promoted cultures | | | | | | 30 |

| Scientists | Titles | Theme | | | | | | | | | | | | | % time |
|------------|----------------------------|-------|---|-----|-----|-----|-----|-----|---|-----|-----|-----|-----|-----|--------|
| | | | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | |
| AICRP | AICRP/PBG/CBE/RIC/New | | <-Kharif trials-----> Medium, Medium slender, FLD | | | | | | Production oriented survey, Reporting & Meeting | | | | | 15 | |
| R | PBG -201,PBG -301& PBG-401 | | | | | | | | | | | | | | 10 |
| Others | Farm Manager | | <-----Administration -----> | | | | | | | | | | | | 30 |

RRS, Ambasamudram

| Scientists | Titles | Theme | | | | | | | | | | | | | % time |
|---|---|-------|-----------------------------|-----|-------------------------|-----|---------------------------|-----|-----|-----|--------------------------|-----|-----|-----|--------|
| | | | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | |
| Dr.S.Arumugachamy Professor (PBG) | | | | | | | | | | | | | | | |
| URP | New- Evolving short duration rice | 3B | < ---- Kharif trials ---- > | | | | < ---- Rabi trials ---- > | | | | Analysis & reporting | | | | 40 |
| AICRP | | | | | | | | | | | | | | | |
| EFP | | | | | | | | | | | | | | | |
| Teaching | Diploma (Agri) Teaching | | STHA21 & ENG X12 | | <---- PG Guidance ----> | | | | | | | | 20 | | |
| Others | Head, Principal, Warden, Extension & development activities | | | | | | | | | | | | | | 40 |
| Dr. A. Muthuswamy, Assistant Professor (PBG) | | | | | | | | | | | | | | | |
| URP | CPBG/ASD/PBG/RIC/2016/001 | 4B | < ---- Kharif trials ---- > | | | | < ---- Rabi trials --- > | | | | Analysis & reporting | | | | 40 |
| | CPBG/ASD/PBG/RIC/2016/002 | | < - - ASD 16 NSP & BSP -- > | | | | <-- ASD 19 NSP & BSP -- > | | | | Seed processing & Supply | | | | 40 |
| AICRP | | | | | | | | | | | | | | | 0 |
| EFP | | | | | | | | | | | | | | | 0 |
| Teaching | Diploma (Agri) Teaching | | AGB A22 | | | | | | | | | | 10 | | |
| Others | TNIAMP Scientist incharge | | | | | | | | | | | | | | 10 |

AC&RI, Killikulam

| Action plan Scientists | Title | Theme | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | % time |
|--|--|----------|---|-----|-----|-----|-----|-----|---|-----|-----|-----------|-----|-----|--------|
| | | | Dr. M. Arumugam Pillai, Professor and Head (PBG) | | | | | | | | | | | | |
| URP | CPBG/ KKM/ PBG/ RIC/ 2014/ 001. | Theme 3b | Evolution of high yielding short duration rice variety (110-115 days) for kar and pishanam seasons of thoothukudi district | | | | | | Reporting | | | 20 | | | |
| EFP | Augmentation and assessment of Redgram global collection and application of molecular approaches for identifying and developing new germplasm to enhance its productivity in India | | assessment of Redgram global collection and application of molecular approaches for identifying and developing new germplasm to enhance its productivity in India | | | | | | | | | Reporting | 10 | | |
| Teaching | PG Education/Student Guide | | | | | | | | | | | | | | 40 |
| Others | Department Administration, Member in Vehicle and Purchase committee | | | | | | | | | | | | | | 30 |
| Dr.R.Pushpam, Associate Professor (PBG) | | | | | | | | | | | | | | | |
| URP | New project proposed | | Development of Cumbu Napier hybrids with superior quality traits for stress areas of Tamil Nadu | | | | | | | | | | | | 15 |
| | Hybrid Rice Breeding – | 7 | | | | | | | Test cross synthesis, Evaluation of A lines and Hybrids | | | | | | 10 |
| | Evaluation of hybrids / composites and conduct of MLT | | | | | | | | | | | | | | 10 |
| EFP | -- | | | | | | | | | | | | | | |
| Teaching | PG Education | | | | | | | | | | | | | | 50 |
| Others | PG Coordinator/ UG Coordinator (1 Year) | | | | | | | | | | | | | | 15 |

| Dr.Saravanan, Assistant Professor (PBG) | | | | | |
|---|-------------------------------|----------|--|----|----|
| URP | CPBG/ KKM/ PBG/ RIC/ 2017/001 | Theme 4b | Development of high yielding medium duration rice variety with desirable cooking quality traits suited for Pishanam season in Southern districts of Tamil Nadu | | 20 |
| | CPBG/ KKM/ PBG/ BSP/ 2014/001 | | Breeder seed production of rice variety ASD 16 | 20 | |
| EFP | NADP/CARDS/KKM/SAC/2016/R010 | | Diversified agricultural cafeteria with the state of art technologies for third generation under NADP | | 5 |
| Teaching | UG/PG Education/Project Guide | | | | 40 |
| Others | Venture capital scheme | | Breeder seed production of TNAU released rice and black gram varieties suited for Thoothukudi and Tirunelveli districts | | 15 |

AC&RI, Madurai

| Scientists | Titles | Theme | | | | | | | | | | | | | % time |
|---|--|-------|--|-----|-----|-----|------------------------|-----|-----|-----------|-----|-----|-----|-----|--------|
| | | | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | |
| Dr.R.P. Gnanamalar, Professor, Dept. of PBG,AC&RI, MDU | | | | | | | | | | | | | | | |
| URP | CPBG/MDU/PBG/RIC/2015/ 002 | | <-Kharif trials-----> | | | | <--Rabi trials-> | | | Reporting | | | 25 | | |
| AICRP | | | | | | | | | | | | | | | 0 |
| EFP | | | | | | | | | | | | | | | 0 |
| Teaching | Guiding PG & PhD students | | <-----PG & PhD guidance-----> | | | | | | | | | | | | 30 |
| | Handling PG and PhD courses | | <-----Teaching-----> | | | | | | | | | | | | 25 |
| Others | Extension activities, MLT | | <-----Extension activities, conduct of MLT-----> | | | | | | | | | | | | 20 |
| Dr. S. Banumathy, Associate Professor (PBG), Dept. of PBG,AC&RI, MDU | | | | | | | | | | | | | | | |
| URP | CPBG/MDU/PBG/ RIC/2017/001 | | <-Kharif trials-----> | | | | <-----Rabi trials ---> | | | Reporting | | | 25 | | |
| AICRP | | | | | | | | | | | | | | | 0 |
| EFP | | | | | | | | | | | | | | | 0 |
| Teaching | Handling UG , PG and PhD courses | | <-----Teaching -----> | | | | | | | | | | | | 30 |
| | PG guidance | | <-----PG guidance-----> | | | | | | | | | | | | 25 |
| Others | Dept. Research Coordinator , extension activities, MLT | | <----- Coordination of dept. research activities-----> | | | | | | | | | | | | 20 |
| Dr. N. Aananthi, Asst. Prof (PBG), Dept. of PBG,AC&RI, MDU | | | | | | | | | | | | | | | |
| URP | CPBG/MDU/PBG/RIC/2015/ 003 | 3a | <-Kharif trials-----> | | | | <--Rabi trials-> | | | Reporting | | | 25 | | |
| AICRP | | | | | | | | | | | | | | | 0 |

| | | | | |
|----------|-------------------------|----|--|----|
| EFP | | | | 0 |
| Teaching | Handling UG, PG courses | | <-----Teaching-----> | 30 |
| | PG guidance | | <-----PG guidance-----> | 20 |
| Others | BSP | 10 | ← Breeder Seed production , coordination of 2014 UG batch activities, UG year co-ordinator, extension activities, MLT--> | 25 |

AC&RI, Trichy

| Scientists | Titles | Theme | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | % time | |
|--|--|-----------------------------|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|--|---|
| Dr. S. Geetha, Professor (PB&G) | | | | | | | | | | | | | | | | |
| URP | Development of HY sodicity tolerant rice varieties with desirable grain quality | Theme <u>1c & 6A</u> | | | | | | | | | | | | | 15 | |
| AICRP | Voluntary centre for IVT & AVT of AL & ISTVT | | | | | | | | | | | | | | | 2 |
| EFP | Salinity Breeding Network and PVS - Phase III" | | | | | | | | | | | | | | | 3 |
| Teaching | Under Graduate: 1 course Post Graduate: 3 courses | -- | | | | | | | | | | | | | 60 | |
| Others | Project Director (FWKC) | -- | | | | | | | | | | | | | 20 | |
| Dr.T.Thirumurugan, Assistant Professor (PB&G) | | | | | | | | | | | | | | | | |
| URP | Evolution of short duration HY rice genotypes tolerant to sodicity Nucleus seed production TRY 1, TRY (R) 2 and TRY 3 | | | | | | | | | | | | | | 15 5 | |
| Teaching | Under Graduate: 3 courses Post Graduate: 3 courses | | | | | | | | | | | | | | 75 | |
| Others | -- | | | | | | | | | | | | | | 5 | |
| | | | | | | | | | | | | | | | • Member of monitoring team of rice network trials, PG Coordinator – Dept. of Plant Breeding and Genetics and Ward counselor for 2015-16 Agri students | |

Tirupathisaram

| Scientists | Titles | Theme | Jun | July | Aug | Sep | oct | Nov | Dec | Jan | Feb | Mar | Apr | May | % time |
|--------------------------------------|---|----------|--|------|-----|-----|-----|-----|---|-----|-----|-----|-----|-----|--------|
| | | | | | | | | | | | | | | | |
| Dr. N. Shunmugavalli, Professor ,PBG | | | | | | | | | | | | | | | |
| URP | Evolving long duration rice variety resistance to stem borer suitable for Kumbapoo season of Kanyakumari district | Theme 4b | | | | | | | Conduct of long duration evaluation trials, Handling segregating populations, MLT and seed multiplication | | | | | | 30 |
| | Evolving early duration rice variety suitable for Kannipoo season of Kanyakumari district | 1b | Conduct of short duration evaluation trials, Handling segregating populations. | | | | | | | | | | | | 30 |
| | Teaching | | | | | | | | | | | | | | 5 |
| | Extension | | Adminstration, FLD, OFT etc., | | | | | | | | | | | | 10 |
| | Others | | | | | | | | | | | | | | 25 |

ARS, Paramakudi

| Scientists | Titles | Theme | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | % time |
|--|----------------------------|-------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| | | | | | | | | | | | | | | | |
| Dr. S. Muthuramu, AssistantProfessor (PBG) | | | | | | | | | | | | | | | |
| URP | CPBG/PMK/PBG/RIC/2015/004 | 6b | ←.....Conducting Trials @Rabi & Reporting.....-> | | | | | | | | | | | | 20 |
| | CPBG/PMK/PBG/BSP/2015/001 | 10a | ←Conducting Trials @Rabi, dispatching the seed & Reporting.....-> | | | | | | | | | | | | 20 |
| EFP | DBT/CPMB/CBE/DPB/2016/R020 | 9a | ←.....Conducting Trials @Rabi & Reporting.....-> | | | | | | | | | | | | 10 |
| Others | | | Farm Manager, TFL seed production, Germplasm maintenance Conducting MLT & OFTs, Vehicle In-charge, Custodian of all the stocks Advisory Committee Member for PG Student Research. | | | | | | | | | | | | 50 |

RRS, Tirur

| Scientists | Titles | Theme | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | % time |
|---|-------------------------------------|-------|--------------------------------|-----|-----|--|-----|-----|---------------------------|-----|-----|------------------|-----|-----|--------|
| | | | | | | | | | | | | | | | |
| Dr. A. Sheeba, Assistant Professor (PBG), RRS, Tirur | | | | | | | | | | | | | | | |
| URP | CPBG/TKM/PBG/RIC/2015/001 | 6b | Seed production – ART cultures | | | <--Yield Evaluation trials under Rainfed / semidry | | | Navarai season | | | Seed production- | | | 30 |
| AICRIP | Voluntary centre | | - | | | AVT –EDS, IVT – EDS | | | Report submission | | | 5 | | | |
| | Nucleus and breeder seed production | 10 | BS despatch – | | | TKM 13 – BSP | | | TKM 9 – BSP | | | 30 | | | |
| | Maintenance breeding & MLT trials | | MLT I | | | MLT II , MLT III, MLT – | | | MLT results consolidation | | | 5 | | | |
| Others | <-----> | | | | | | | | | | | | | | 50 |

ARS, Vaigai Dam

| Scientists | Titles | Theme | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | % time |
|--|---|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| | | | | | | | | | | | | | | | |
| Dr.S.JulietHepziba, Professor (PBG) and Head, ARS, Vaigai Dam | | | | | | | | | | | | | | | |
| Administration | P&H, ARS - Office administration | | | | | | | | | | | | | | 40 |
| Research | Breeder Seed Production in Rice | 10a | | | | | | | | | | | | | 30 |
| Teaching | Guiding PG and PhD students | | | | | | | | | | | | | | 20 |
| Others | Extension activities, Pulses and Oilseeds Breeder Seed Production | 10a | | | | | | | | | | | | | 10 |

| | | | | | |
|--|---|--|--|--|----|
| | MSSIA, Bhavanisagar | | | | |
| Others | URP – Pulses CPBG/BSR/PBG/GGR/2016/001 | | Breeder seed production in greengram, blackgram varieties and evaluation of pre released cultures under multi location trial testing | | 20 |
| | | | Farm Manager for Pungar block of ARS, Bhavanisagar, NSP (RF) Scientist incharge, Block Level Scientist incharge for Talavady block of Erode district | | 40 |
| ARS, Bhavanisagar Dr. A. Bharathi., Assistant Professor (PBG) | | | | | |
| URP | CPBG/PKT/PBG/BSP/2015/003 | | <---Breeder Seed production (Short and Medium duration varieties ----> | Processing, & Despatch | 20 |
| | CPBG/PKT/PBG/BGR/2016/001 | | Processing, Tagging, Testing, Despatch | <----Breeder Seed production ----> | 20 |
| | SOSF, Vellalaviduthi (BS incharge) | | <-----Kharif production-- | <-----Rabi production-----> | 20 |
| MLT | | | <---- Rice MLTs (Short duration & Medium duration) | Black gram MLT, Reporting | 10 |
| ICAR_RF | | | | <---Seed production under ICAR_RF, Report ---> | 10 |
| Others | | | DAI, Coordinator, Research Coordinator, Store Manager | | 20 |

II. Crop Management

Action plan 1:

Comparative performance of different crop establishment methods for Rice - Rice - Black gram cropping system

Action plan 2:

Alternate cropping system for Cauvery Delta Zone

Action plan 3:

Traditional rice cultivation through organics under rainfed ecosystem

Action plan 4:

Screening short duration rice genotypes for high grain Zn enrichment through mineral Zn fertilization

Action plan 5:

Development of technology for improving the productivity in Sodic Soil under water Scarce condition.

Action plan 6:

Improvement of grain filling in rice by foliar spray of nutrients and growth promoters

Action plan 7: Evaluation of zinc solubilizing bacteria for Zn fertilization and fortification of rice

Action plan 8:

Development of seed coating strategy to overcome rice seed dormancy

| S. No | Name of the scientist | Action plan 1 | Action plan 2 | Action plan 3 | Action plan 4 | Action plan 5 | Action plan 6 | Action plan 7 | Action plan 8 | Total |
|-------|-----------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------|
| | | Man hours/week | | | | | | | | |
| 1. | Dr.K.Subrahmaniyan | 10 | 10 | - | - | - | - | - | - | 20 |
| 2. | Dr.M.Raju | | 12 | - | - | - | 10 | - | - | 22 |
| 3. | Dr.C.Umameshwari | 15 | - | - | - | - | - | - | - | 15 |
| 4. | Dr. S. Porpavai | - | 10 | - | - | - | - | - | - | 10 |
| 5. | Dr.K.Rajendran | - | - | - | - | - | 15 | - | - | 15 |
| 6. | Dr.A.Gurusamy | - | - | - | - | - | 15 | - | - | 15 |
| 7. | Dr. S.K.Natarajan | 20 | - | - | - | - | - | - | - | 20 |
| 8. | Dr.N.Senthil Kumar | 20 | - | - | - | - | - | - | - | 20 |
| 9. | Dr.Ganesa Raja | 15 | - | - | - | - | - | - | - | 15 |
| 10. | Dr.S.Sakthivel | - | - | 20 | - | - | - | - | - | 20 |
| 11. | Dr.L.Chithra | 10 | - | - | - | - | - | - | - | 10 |
| 12. | Dr.C.Sharmila Rahale | - | 20 | - | - | - | - | - | - | 20 |
| 13. | Dr.P.Jothimani | - | - | - | 20 | - | - | - | - | 20 |
| 14. | Dr.V.Arunkumar | - | - | - | 20 | - | - | - | - | 20 |
| 15. | Dr.T.Chitdeshwari | - | - | - | 5 | - | - | - | - | 5 |
| 16. | Dr.D.Jegadeeswari | - | - | - | 10 | - | - | - | - | 10 |
| 17. | Dr.P.Santhy | - | - | - | - | 10 | - | - | - | 10 |
| 18. | Dr.P.Balasubramaniam | - | - | - | - | 20 | - | - | - | 20 |
| 19. | Dr.A.Alagesan | - | - | - | - | 20 | - | - | - | 20 |
| 20. | Dr. J. Renugadevi | - | - | - | - | - | - | - | 20 | 20 |
| 21. | Dr. M. Jeya Bharthi | 3 | 3 | - | - | - | - | 5 | - | 11 |
| 22. | Dr.B.Jeberlin Prabina | - | - | - | - | - | - | 2 | - | 2 |
| 23. | Dr.K.Sabarinathan | - | - | - | - | - | - | 2 | - | 2 |
| 24. | Dr. H. Gopal | - | - | - | - | - | - | 2 | - | 2 |

II. Crop Protection

i. Agricultural Entomology

Theme 1: Prediction of changing insect pest scenario

(Through light trap/pheromone trap/in situ counts/survey)

Theme 2: Ecological engineering approaches for rice pest management

Theme 3: Exploring insect resistance mechanism

Theme 4: Tritrophic interaction for rice pest management

| S.No. | Name of the scientist | Theme 1 | Theme 2 | Theme 3 | Theme 4 | Total |
|--------------------|----------------------------|---------|---------|---------|---------|-------|
| (Man hours / week) | | | | | | |
| 1. | Dr.N.Muthukrishnan, CBE | | 5 | | 5 | 10 |
| 2. | Dr. R.P.Soundararajan, CBE | 3 | | 5 | | 8 |
| 3. | Dr. V. G. Mathirajan, ADT | 3 | 5 | 5 | 5 | 18 |
| 4. | Dr.R.Nalini, SWMRI | 3 | 5 | 5 | 5 | 18 |
| 5. | AC & RI, MDU* | 3 | 5 | 5 | 5 | 18 |
| 6. | Dr.Sheeba, TRY | 3 | | 5 | | 8 |
| 7. | Dr.G.Ravi, KKM | | 5 | 5 | | 10 |
| 8. | Dr.K. Ilenchezian, KKM | 3 | | | | 3 |
| 9. | Dr.M.A.K.Pillai, ASD | 3 | | 5 | | 8 |
| 10. | Dr.Sheela Venugopal, BSR | 3 | | 5 | | 8 |
| 11. | Dr.G.Preetha, TPS | 3 | | 5 | | 8 |
| 12. | Dr.P.Thilagam, PYR | 3 | | 5 | | 8 |

* Scientist has to be identified to carry out the works.

ii. Plant Pathology

Theme 1 : Pest and disease surveillance and forecasting

Theme 2 : Studies on epidemiology of rice diseases

Theme 3 : Identification of resistant sources for pests and diseases

Theme 4 : Studies on mechanism of resistance

Theme 5 : Management of rice diseases through eco-friendly approaches

| S. No. | Name of the Scientist | Theme 1 | Theme 2 | Theme 3 | Theme 4 | Theme 5 | Total |
|--------------------|-----------------------|---------|---------|---------|---------|---------|-------|
| (Man hours / week) | | | | | | | |
| 1. | Dr.K. Rajappan | 2 | 3 | 5 | 2 | 4 | 16 |
| 2. | Dr.P. Ahila devi | 1 | 2 | 5 | 2 | 1 | 11 |
| 3. | Dr.R. Thilagavathi | 1 | 2 | 5 | 2 | 1 | 11 |
| 4. | Dr.N. Rajinimala | 1 | 2 | 2 | 3 | 3 | 11 |
| 5. | Dr.A. Ramanathan | 3 | 5 | 5 | 2 | 3 | 18 |
| 6. | Dr. M. Karthikeyan | 3 | 4 | 3 | 2 | 4 | 16 |
| 7. | Dr. R. Akila | 2 | 5 | 2 | 2 | 3 | 14 |
| 8. | Dr.S. Thiruvudainambi | 2 | 3 | 1 | 4 | 2 | 12 |
| 9. | Dr. N. Revathy | 3 | 3 | 2 | 2 | 2 | 12 |
| 10. | Dr. K. Chitra | 4 | 4 | 3 | 3 | 2 | 16 |
| 11. | Dr. L. Karthiba | 4 | 5 | 3 | 2 | 1 | 15 |
| 12. | Dr. M. Jayasekhar | 2 | 4 | 5 | 3 | 1 | 15 |

WORK LOAD OF RICE SCIENTISTS FOR THE YEAR 2017-18

I. Crop Management

| S.No. | Scientists | % of time |
|-------|-----------------------------|-----------|
| | Agronomy | |
| 1. | K. Subrahmaniyan | |
| | Univ. Sub Project | 10 |
| | AICRIP | 50 |
| | Administration | 30 |
| | Other activities | 10 |
| 2. | M.Raju | |
| | Univ. Sub Project | 10 |
| | AINPJAF | 50 |
| | TNIAM | 20 |
| | Farm management | 15 |
| | Other activities | 10 |
| 3. | Dr.C.Umameshwari | |
| | Univ.Sub Project | 30 |
| | AICRIP | 50 |
| | Other activities | 20 |
| 4. | Dr. S. Poorpavai | |
| | Univ. Sub Project | 20 |
| | AICRP | 40 |
| | Administration | 35 |
| | Others | 5 |
| 5. | Dr.K. Rajendran | |
| | Univ.Sub Project | 25 |
| | AICRIP | 50 |
| | Teaching | 20 |
| | Other activities | 5 |
| 6. | Dr.A.Gurusamy | |
| | Univ. Sub Project | 10 |
| | Teaching | 60 |
| | Other activities | 30 |
| 7. | Dr. S.K.Natarajan | |
| | AICRIP | 50 |
| | Farm management | 20 |
| | Teaching | 20 |
| | others | 10 |
| 8. | Dr. N. Senthil Kumar | |
| | Univ. Sub Project | 30 |
| | Teaching | 60 |
| | Other activities | 10 |

| S.No. | Scientists | % of time |
|-------|-----------------------------|-----------|
| | Agronomy | |
| 9. | Dr.Ganesa Raja | |
| | Univ. Sub Project | 25 |
| | Teaching | 35 |
| | Other activities | 40 |
| 10. | Dr.S.Sakthivel | |
| | Univ. Sub Project | 20 |
| | Administration | 50 |
| | Other activities | 30 |
| 11. | Dr.S.Vallal Kannan | |
| | Univ. Sub Project | 30 |
| | Teaching | 60 |
| | Other activities | 10 |
| 12. | Dr.M.Hemalatha | |
| | Univ. Sub Project | 20 |
| | Teaching | 50 |
| | Other activities | 30 |
| 13. | Dr.N.S.Venkataraman | |
| | Univ. Sub Project | 30 |
| | Administration | 15 |
| | Teaching | 55 |
| | Other activities | 5 |
| 14. | Dr. S. Anitta Fanish | |
| | Univ. Sub Project | 25 |
| | Teaching | 50 |
| | Other activities | 25 |
| 15. | Dr. S. Avudaithai | |
| | Univ. Sub Project | 30 |
| | Teaching | 50 |
| | Other activities | 20 |
| 16. | Dr. C. Muralidharan | |
| | Univ. Sub Project | 40 |
| | Teaching | 20 |
| | Other activities | 40 |

| Crop Physiology | | |
|------------------------|-----------------------------|----|
| 1. | Dr. V. Ravichandran | |
| | Univ. Sub Project | 20 |
| | AICRP | 40 |
| | Teaching | 30 |
| | Other activities | 10 |
| 2. | Dr. D. Vijayalakshmi | |
| | Externally funded | 40 |
| | Teaching | 45 |
| | Other activities | 15 |
| 3. | Dr. P. Boominathan | |
| | Univ. Sub Project | 10 |
| | Externally funded | 20 |
| | Teaching | 50 |
| | Other activities | 20 |

Agri. Microbiology

| | | |
|----|-----------------------------|----|
| 1. | Dr. M. Jeya Bharathi | |
| | Farmers guideline | 20 |
| | Research | 40 |
| | Administration | 20 |
| | Other Activities (VCS) | 10 |
| 2. | Dr. D. Balachander | |
| | AICRIP work | 40 |
| | Teaching | 20 |
| | Externally funded | 20 |
| | Administration | 10 |
| | Other Activities | 10 |
| 3. | Dr. U. Sivakumar | |
| | Externally funded | 40 |
| | Teaching | 20 |
| | Other Activities | 10 |
| 4. | Dr.N.O.Gopal | |
| | Univ. Sub Project | 30 |
| | Teaching | 30 |
| | Administration | 20 |
| | Other Activities | 20 |
| 5. | Dr.K.G.Anitha | |
| | AICRIP work | 50 |
| | Teaching | 25 |
| | Students guide | 20 |
| | Other Activities | 5 |

| Crop Physiology | | |
|------------------------|-----------------------------------|----|
| 4. | Dr. K. Vanitha | |
| | Univ. Sub Project | 40 |
| | Externally funded | 30 |
| | VCS | 20 |
| | Other activities | 10 |
| 5. | Dr.A.Anderson Amalan Kumar | |
| | Univ. Sub Project | 20 |
| | Teaching | 50 |
| | Other activities | 30 |

| | | |
|----|--------------------------------|----|
| 6. | Dr. K. Kumutha | |
| | Externally funded | 20 |
| | Univ. Sub Project | 10 |
| | Teaching | 20 |
| | Students guide | 40 |
| | Administration | 10 |
| 7. | Dr. B. Jeberlin Prabina | |
| | Univ. Sub Project-1 | 40 |
| | Teaching | 40 |
| | Administration | 10 |
| | Other Activities | 10 |
| 8. | Dr. K. Sabarinathan | |
| | Subproject | 20 |
| | NADP | 10 |
| | Administration | 10 |
| | UG teaching | 40 |
| | Extension | 10 |
| 9. | Dr. H. Gopal | |
| | Univ. Sub Project-1 | 30 |
| | Administration | 30 |
| | Other Activities | 40 |

| Seed Science & Technology | | |
|--------------------------------------|--------------------------|----|
| 1. | K. Raja | |
| | Univ. Research Project-1 | 20 |
| | Univ. Research Project-2 | 20 |
| | Seed production | 10 |
| | GOT (Rice) | 10 |
| | Others (Coordinator) | 40 |
| 2. | J. Renugadevi | |
| | Uni. Research project-1 | 20 |
| | Teaching | 30 |
| | Student guide | 30 |
| | Other activities | 20 |
| 3. | V. Vakeswaran | |
| | Univ. Research Project-2 | 20 |
| | AICRP | 40 |
| | Teaching | 20 |
| | Student guide | 10 |
| | ICAR Seed Project | 10 |

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|----|--------------------------|----|
| 4. | R. Vigneshwari | |
| | Univ. Research Project-1 | 20 |
| | AICRP | 10 |
| | Seed production | 30 |
| | Other Activities (Farm) | 40 |
| 5. | N. Punithavathi | |
| | Univ. Research Project-1 | 20 |
| | Univ. Research Project-1 | 10 |
| | Seed production | 25 |
| | OFT | 10 |
| | Teaching & Co-ordinator | 25 |
| | Other Activities (Farm) | 10 |

| Soil Science and Agrl. Chemistry | | | | | |
|---|------------------------------|------|-----|-----------------------------|----|
| 1. | Dr.L.Chithra | | 8. | Dr.P.Santhy | 20 |
| | Univ. Sub Project | 10 | | Research | 40 |
| | Research work | 35 | | Adminstration | 30 |
| | Administration | 20 | | Teaching | 10 |
| | PG coordinator | 10 | | Other activities | |
| | Students Guidance | 20 | 9. | Dr.P.Balasubramaniam | 20 |
| | Extension | 5 | | Univ. Sub Project | 30 |
| 2. | Dr.C.Sharmila Rahale | | | AICRP | 20 |
| | Univ. Sub Project | 50 | | Externally Funded | 20 |
| | Extension | 10 | | Teaching | 10 |
| | Other activities | 40 | | Other activities | |
| 3. | Dr.P.Jothimani | | 10. | Dr. A.Alagesan | 60 |
| | Univ. Sub Project | 40 | | AICRP | 30 |
| | Externally Funded(Co-PI) | 20 | | Teaching | 10 |
| | Extension | 10 | | Other activities | 10 |
| | Students Guidance | 10 | 11. | Dr.S.Janaki | |
| | Others | 20 | | Teaching | 60 |
| 4. | Dr.M.Babu | | | URP | 20 |
| | Univ.Sub Project | 50 | | Extension | 10 |
| | Analytical work | 25 | | Others | 10 |
| | Teaching | 12.5 | 12. | Mr.Pandarinathan | |
| | Extension & other activities | 12.5 | | Univ. Sub Project | 20 |

| | | |
|----|-----------------------|----|
| 5. | Dr.S.Suresh | |
| | Univ. Sub Project | 44 |
| | Teaching | 20 |
| | Extension | 6 |
| | Other activities | 30 |
| 6. | Dr.V.Arunkumar | |
| | Univ. Sub Project | 20 |
| | Teaching | 50 |
| | Extension | 10 |
| | Other activities | 20 |
| 7. | Dr.S.Jothimani | |
| | Univ. Sub Project | 20 |
| | Externally Funded | 20 |
| | Teaching | 20 |
| | Extension&Farm Mgt. | 30 |
| | Other activities | 10 |

| | | |
|-----|-------------------------------|----|
| | Teaching | 60 |
| | Others | 20 |
| 13. | Dr.S.Thenmozhi | 30 |
| | Teaching | 50 |
| | Other activities | 20 |
| 14. | Dr.M.Baskar | |
| | Univ. Sub Project | 20 |
| | Teaching | 60 |
| | Students Guidance | 10 |
| | Others | 10 |
| 15. | Dr.P.Saravana Pandiyan | |
| | Univ. Sub Project | 25 |
| | Teaching | 60 |
| | Students Guidance | 10 |
| | Other activities | 5 |

II. Crop Protection

i. Agricultural Entomology

| S. No. | Scientists | % of time |
|--------|----------------------------------|-----------|
| 1. | Dr.N.Muthukrishnan | |
| | Univ. Sub Project-1 | 20 |
| | AICRIP | |
| | Other projects | 40 |
| | Teaching /other responsibilities | 40 |
| 2. | Dr. R.P.Soundararajan | |
| | Univ. Sub Project-1 | 20 |
| | AICRIP | 50 |
| | Other projects | 10 |
| | Teaching /other responsibilities | 20 |
| 3. | Dr.M.Kannan | |
| | Univ. Sub Project-1 | 20 |
| | AICRIP | |
| | Other projects | 60 |
| | Teaching /other responsibilities | 20 |
| 4. | Dr. V. G. Mathirajan | |
| | Univ. Sub Project-1 | 20 |
| | AICRIP | 50 |
| | Other projects | 20 |

| S. No. | Scientists | % of time |
|--------|----------------------------------|-----------|
| 8. | Dr.G.Ravi | |
| | Univ. Sub Project-1 | 20 |
| | AICRIP | |
| | Other projects | |
| | Teaching /other responsibilities | 80 |
| 9. | Dr.K. Ilanchezian | |
| | Univ. Sub Project-1 | 20 |
| | AICRIP | |
| | Other projects | |
| | Teaching /other responsibilities | 80 |
| 10. | Dr.M.A.K.Pillai | |
| | Univ. Sub Project-1 | 20 |
| | AICRIP | |
| | Other projects | 20 |
| | Teaching /other responsibilities | 60 |
| 11. | Dr.Sheela Venugopal | |
| | Univ. Sub Project-1 | 20 |
| | AICRIP | |
| | Other projects | 20 |

| | | |
|----|----------------------------------|----|
| | Teaching /other responsibilities | 10 |
| 5. | Dr.R.Nalini | |
| | Univ. Sub Project-1 | 20 |
| | AICRIP | |
| | Other projects | 60 |
| | Teaching /other responsibilities | 20 |
| 6. | Dr. V.A.Vijayashanthi | |
| | Univ. Sub Project-1 | 20 |
| | AICRIP | |
| | Other projects | 40 |
| | Teaching /other responsibilities | 40 |
| 7. | Dr.Sheeba | |
| | Univ. Sub Project-2 | 20 |
| | AICRIP | |
| | Other projects | 40 |
| | Teaching /other responsibilities | 40 |

| | | |
|-----|----------------------------------|----|
| | Teaching /other responsibilities | 60 |
| 12. | Dr.G.Preetha | |
| | Univ. Sub Project-1 | 40 |
| | AICRIP | |
| | Other projects | 40 |
| | Teaching /other responsibilities | 20 |
| 13. | Dr.P.Thilagam | |
| | Univ. Sub Project-1 | 20 |
| | AICRIP | |
| | Other projects | 60 |
| | Teaching /other responsibilities | 20 |

ii. Plant Pathology

| S. No. | Scientists | % of time |
|--------|---------------------------|-----------|
| 1. | Dr.K. Rajappan | |
| | AICRIP work | 34 |
| | Teaching | 16 |
| | Students guide | 20 |
| | Administration | 20 |
| | Other Activities | 10 |
| 2. | Dr.P. Ahila Devi | |
| | Univ. Sub Project-2 | 44 |
| | Teaching | 16 |
| | Externally funded | 20 |
| | Other Activities | 20 |
| 3. | Dr.R. Thilagavathi | |
| | Univ. Sub Project-2 | 35 |
| | Teaching | 15 |
| | Externally funded | 15 |
| | Other Activities | 35 |
| 4. | Dr.N. Rajinimala | |
| | Univ. Sub Project-1 | 50 |
| | Teaching | 20 |

| S. No. | Scientists | % of time |
|--------|------------------------------|-----------|
| 7. | Dr. R. Akila | |
| | Univ. Sub Project-1 | 20 |
| | Teaching | 50 |
| | Other Activities | 30 |
| | | |
| | | |
| 8. | Dr.S. Thiruvudainambi | |
| | Univ. Sub Project-1 | 20 |
| | Teaching | 50 |
| | Students Guide | 20 |
| | Other Activities | 10 |
| 9. | Dr. N. Revathy | |
| | Univ. Sub Project-1 | 20 |
| | Teaching | 50 |
| | Students guide | 20 |
| | Other Activities | 10 |
| 10. | Dr. K. Chitra | |
| | Univ. Sub Project-1 | 50 |
| | Teaching | 40 |

| | | |
|----|---------------------------|----|
| | Other Activities | 30 |
| 5. | Dr.A. Ramanathan | |
| | AICRIP work | 50 |
| | Teaching | 25 |
| | Students guide | 20 |
| | Other Activities | 5 |
| 6. | Dr. M. Karthikeyan | |
| | Univ. Sub Project-1 | 40 |
| | Teaching | 40 |
| | Other Activities | 20 |

| | | |
|-----|--------------------------|----|
| | Other Activities | 10 |
| 11. | Dr. L. Karthiba | |
| | Univ. Sub Project-1 | 20 |
| | Teaching | 50 |
| | Other Activities | 30 |
| | | |
| 12. | Dr. M. Jayasekhar | |
| | Univ. Sub Project-1 | 80 |
| | Other Activities | 20 |
| | | |