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ICAR-Indian Institute of Rice Research

NEWSLETTER

Volume: 18 Number: 2 RICE IS LIFE April - June 2020

55th Annual Rice Group Meeting (ARGM)

The 55th ARGM was held during 11th May to 13th May, 2020 through virtual mode and attended by Honourable DG, ICAR, Dr. T. Mohapatra, DDG, CS, Dr. T.R. Sharma and all the co-operators of AICRIP, Private industry personnel and subject matter experts. Dr. D. Maithi, Director, ICAR-NRRI welcomed the participant delegates followed by brief highlights of research progress during 2019 under AICRIP by Dr. S.R. Voleti, Director, ICAR-IIRR. Dr. T. Mohapatra highlighted the country's self-sufficiency in food production despite the serious COVID-19 situation. He emphasized on the need to expedite research in the areas of hybrid rice production, nitrogen use efficiency, water use efficiency, pre-breeding, speed breeding, multiple pest resistance and harmonious integration of IPM research in different institutes. He suggested ICAR-IIRR to execute *Production Oriented Survey* for guiding policy makers in rice sector. Dr. T.R. Sharma, DDG (CS) stressed on the need of effective package of practices for direct seeded rice areas in North Western India. The ICAR officials complimented ICAR-IIRR for conducting first Virtual Annual Rice Group meeting.

In the crop improvement proceedings, it was decided to concentrate more on pre-breeding lines, breeding for parboiled rice, coloured rice, Aromatic Short Grain (ASG) rice varieties for export market, appropriate statistical designs and robust system for testing the near isogenic lines (NILs). The improved NILs with additional QTLs/genes governing seedling and reproductive stage salinity tolerance gene(s)/QTL(s) shall be considered for NILs nominated for salinity tolerance. For drought tolerance,

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NILs introgressed with QTLs governing reproductive stage drought tolerance, the trait verification based on the rainout shelter data should be considered. It was recommended that grain quality data at least from three centres is compulsory for promotion. Initiation of Consortia Platform on Hybrid rice was emphasized at national level. It was also decided in the meeting that the system of promotion of entries will be reverted back to the overall basis instead of the existing practice of promotion on zonal basis.

In the crop production proceedings, it was recommended that the organic rice trials should be initiated in different zones, more efforts need to be focused on dry direct seeded rice, silicon protocol and collaborations with other AICRPs for cropping systems. It was suggested to use Pusa decomposer developed by IARI for the faster decomposition of crop residues in Soil Science trials and to calculate the reduction in other nutrients except one also is in long term trials.

In the crop protection proceedings, it was recommended that the germplasm having confirmed resistance reaction for more than three seasons should be characterized for the presence of novel resistance genes and resistance genes effective in India should be deployed in breeding programmes. The insect pest dynamics should be studied in the context of climate change and accordingly policy interventions need to be designed. The set of differentials used for resistance screening should be updated regularly. Concentrated efforts need be made on the inter-institutional collaborations for IPM trials with NCIPM.

In the transfer of technologies, the need of more number of FLDs in the North and North Eastern Regions was recommended. It was recommended to popularize bio-fortified crop varieties.

55th ARGM-Varietal Identification Committee (VIC) Meeting

Though the Varietal Identification Committee (VIC) meeting, a component part of ARGM was held at a later date on 10th June, 2020 is virtual mode under the chairmanship of Dr. T.R. Sharma, DDG (Crop Science), ICAR. A total of 31 proposals were received for VIC including 22 varietal and 9 hybrids from ICAR institutes, universities and private seed companies. The proposals were critically examined for their overall, zonal and state yield performance over the years, biotic/ abiotic stresses, performance in agronomic trials and quality features.

The following varieties were identified for defined regions viz. the irrigated mid early variety, IET 26125 [(Telangana Vari-3 (JGL 21078)] for the States of Telangana and Kerala (Zone VII), irrigated medium variety, IET 26027 (WGL-697) for the States of Telangana, Andhra Pradesh, Tamil Nadu and Kerala (Zone VII), IET 27263 [CR Dhan 314 (CR 4113-3-2-L) identified for Odisha and Bihar (Zone III). Early transplanted variety, IET 26803(IIRR Dhan 56) for Punjab and Haryana (Zone II), IET 26995 [Pusa Basmati 1692 (Pusa 1692-10-20-1-1-1] identified for the States of Delhi Haryana and Uttar Pradesh (Basmati GI areas), IET 25653 [IIRR Dhan 54 (RP 5943-421-16-1-1-B) Odisha, Bihar and Jharkhand (Zone III), Haryana (Zone II), Gujarat (Zone VI) and Telangana Zone VII), IET 26194 [IIRR Dhan 55 (RP 5591-123-16-2) for Bihar (Zone III) and Chhattisgarh (Zone V). A marker-assisted selection NIL of ISM, IET 27294 [IIRR Dhan 53 (RP 6113-Patho-BB9)] for bacterial leaf blight [BB) resistance was identified for the States of Andhra Pradesh, Telangana (Zone VII), Chhattisgarh, Maharashtra (Zone V), Jharkhand, Odisha, Bihar (Zone III), Gujarat, Maharashtra (Zone VI). The bio-fortified variety with high zinc content IET 27L79 [CR Dhan 315 (CR 2826-1-1-2-4B-2-1) was identified for Maharashtra and Gujarat (Zone VI). The irrigated early variety, IET 25819 [VL Dhan 88 (VL 32224) was identified for Himachal Pradesh, Uttarakhand and Meghalaya (Zone I).

Hybrids *viz.* Basmati hybrid IET 26999 (Indam 100-012) were identified for the States of Uttar Pradesh and Punjab (Zone II), early transplanted hybrid IET 24914 (JKRH 2154) for Haryana and Punjab Zone II', Bihar, Uttar Pradesh and West Bengal (Zone III), hybrid IET 26477 [ADV 8082 (RH 150025) for Maharashtra and Chhattisgarh (Zone VI), irrigated mid early hybrid IET 25745 (PHI 16101) for Uttarakhand Zone II), Chhattisgarh and Maharashtra (Zone V), early transplanted hybrid IET 26468 JKRH 2354 for Chhattisgarh, Madhya Pradesh and Maharashtra (Zone V), irrigated late hybrid IET 25948 [RRX 717 (RRX 027) for Uttar Pradesh (Zone III), Chhattisgarh (Zone V), medium slender grain hybrid IET 26549 [(28S44 (PHI 17108)] for Telangana, Karnataka and Andhra Pradesh (Zones VII).

Institute Management Committee (IMC) meeting

The XXIV Institute Committee meeting was held on 8th June, 2020 at ICAR-IIRR. The IMC meeting was chaired by Dr. S.R. Voleti, Director, IIRR and attended by members, Dr. R. Jagadeeshwar, Director of Research, PJTSAU, Dr. S.K. Pradhan, Principal Scientist, NRRI, Cuttack, Shri. Z. H. Khilji, Chief Finance and Accounts Officer, NAARM, Shri. K. Srinivasa Rao, Finance and Accounts Officer, IIRR Shri. B. Satish, Senior Administrative Office (Member Secretary).

Research Advisory Committee (RAC)

The RAC meeting was held on 16th June, 2020 through virtual mode. The Chairman, Prof. Akhilesh Tyagi, University of Delhi South Campus, New Delhi chaired the meeting and the RAC members *viz.* Drs Leena Kumari, N. Raghuram, Mayabini Jena, P.C. Rao, Prem Lata Singh, Y.P. Singh, ADG (FFC), Dipankar Maiti, Director, NRRI participated in the meeting. Dr. S.R. Voleti, Director, IIRR welcomed the RAC members and made a brief presentation on the activities and achievements followed by the presentation of action taken report by Dr. S.M. Balachandran, Member Secretary, RAC and research highlights by the heads and principal investigators. The RAC Chairman and Members complemented the efforts of IIRR scientists in continuing the research experiments even during the pandemic times of Covid-19. It was recommended to accelerate the work on analyzing Big-data, protein digestibility bio-availability experiments, utilization of improved B-lines and R-line, gene editing, direct seeded rice, aerobic rice, carbon sequestration rate, soil physical, chemical and microbiological parameters, heat stress tolerance, stem rot and sheath rot, popularization of IPM impact and analysis of IIRR technologies.

Institute Research Council (IRC) meeting

Virtual Institute Research Council (IRC) Meeting Day I - 23 June, 2020

The Institute Research Council (IRC) Meeting 2020 was held from 23rd-25th June, 2020 through virtual mode. Dr. G.S. Laha, Secretary, IRC welcomed all the IRC members and briefed regarding the meeting. Dr. S.R. Voleti, Director, IIRR, Chairman IRC emphasized the role of rice research in food security of India. The scientists made their presentations followed by brief discussions and recommendations. It was suggested that the rice lines having 10.6% protein content should be used for progeny breeding, promising lines developed using tropical *japonica* should be tested for fertility restoration trait, the microbial community in different rice ecosystem should be characterized, strategies to percolate, popularize IIRR technologies, its impact among the farmers should be evaluated.

New Projects approved during IRC-2020

Sr. No.	Project Title	PI and Co-PI
1	Breeding for high yielding water use efficient short duration rice hybrids & varieties	Dr. AVSR Swamy Co-PI: Drs. LV Subba Rao, Jyothi Badri, R Abdul Fiyaz, D Subrahmanyam, R M Sundaram, M. Sheshu Madhav
2	Novel genetic approaches for development of Climate Smart Rice varieties	Dr. Suneetha Kota Co-PI: Drs. G. Padmavathi, P. Senguttuvel, C. Gireesh, R. M. Sundaram, Santosha Rathod, Kalyani Kulkarni Collaborator: Dr. C. Viswanathan, Physiologist, IARI
3	Genetic enhancement of specialty rices of India	Dr. Abdul Fiyaz Co-PI: Drs. L V Subbarao, J. Arvind Kumar, M M Azam, P. Raghuvir Rao, R. M. Sundaram, K. Basavaraj
4	Development of climate smart and economic weed management technologies for changing establishment systems	Dr. B. Sreedevi Co-PIs: Drs. Soumya Saha, GS Laha, Jyothi Badri and C Gireesh

5	Bio-efficacy and toxicological studies of insecticides against major rice pests	Dr. Y. Sridhar Co-PI: Drs. V. Jhansilaxmi, A. P. Padma Kumari, Chitra Shanker, Ch. Padmavathi, G. S. Jesudasu, B. Sreedevi
6	Impact acceleration with digital extension ecosystem for rice farmers	Dr. Shaik N Meera Co-PI: Drs. S. Arun Kumar, Santosha Rathod

Inception and Progress of Distinctness, Uniformity and Stability (DUS) Tests at ICAR-IIRR -A Status Report

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To establish an efficient system for protection of plant varieties, farmers and plant breeders' rights and to encourage the development of new varieties of plants it is important to recognize and protect farmers' rights with respect to their contribution in conserving, improving and to make available plant genetic resources for the development of new varieties. Further, for accelerating the agricultural development, protection of plants breeders' rights is necessary to stimulate investment for research and development. This protection would facilitate the seed industry's growth thereby ensuring the availability of good quality seeds and planting material to the farmers. Since, India has ratified the Agreement on Trade Related Aspects of the Intellectual Property Rights it had to make provision for establishing a system of plant variety protection either through patents or *'Sui generis'* legislation or a combination there of. To give effect to the aforesaid objectives the "Protection of Plant Varieties and Farmers' Rights Act, 2001" has been enacted in India. In order to implement this Act, "Protection of Plant Varieties and Farmers' Rights Authority" (PPV & FRA) was established with its headquarters at New Delhi.

In order to grant the "Plant Breeders' Rights" (PBRs), it is compulsory to produce the data on Distinctness, Uniformity and Stability (DUS) of the candidate varieties as per the PPV&FR Act, 2001. Therefore, for the purpose of establishing the DUS guidelines in rice, the related work was initiated at ICAR-IIRR during 2002. Since then ICAR-IIRR Hyderabad has played a pioneering role in developing the 1st DUS test guidelines for rice (first of its kind for any crop in India) and descriptors (29 essential and 33 additional) for conducting DUS tests. ICAR-IIRR, Hyderabad is the nodal centre with four other co-nodal centers: NRRI, Cuttack; AAU, Jorhat; TNAU, Coimbatore and; IARI Regional Station, Karnal.

The evaluation procedure of each entry includes planting in 11 rows with 30 hills, 6m row length and as spacing of 30 x 20cm. The experimental design (RBD) consists of 3 replications for irrigated and shallow lowland while 5 replications for upland, saline alkaline, semi-deep water and deep water.

The candidate/new entries are tested at two different ideal locations in two similar seasons while "Farmers Varieties" (FV) and "Varieties of Common Knowledge" (VCKs) are tested for one season only. Observations on 62 descriptors are recorded as per DUS test guidelines at different growth stages. First DUS tests in rice were initiated in 2008 with eight new varieties and since then DUS testing is an annual activity at IIRR. ICAR-IIRR facilitated the registration of 'Extant Notified Varieties (ENVs)' of IIRR released varieties with PPV& FRA viz., Krishna Hamsa, Shanthi, Improved Samba Mahsuri, Vasumati, Sugandhamati, Triguna, Dhanrasi, Jarava, Akshayadhan, Sampada. Overall, 2374 FVs, 342 new varieties and 84 VCKs/extant varieties have been tested as listed in Fig. 1.

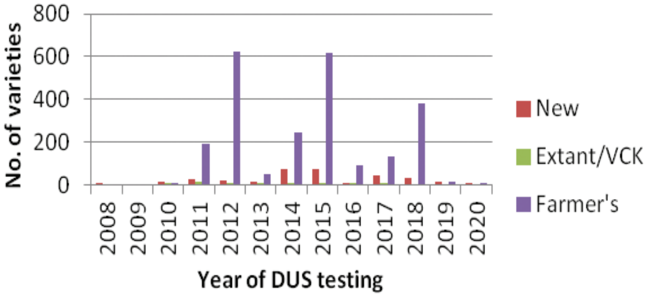

Fig. 1: Status of DUS tests at ICAR-IIRR

Research Highlights

Promising BPT-5204 mutant lines having robust root system architecture suitable for aerobic condition

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The root system architecture governs the uptake efficiency of water and mineral nutrients from soil; however is comparatively unexplored trait due to tedious and laborious root phenotyping. In the current scenario of water scarcity, climate change, the aerobic system of cultivation by direct seeding in rice is an economical, climate smart technology that requires need based water with proper management. Identification and development of aerobic adapted rice lines and understanding of traits, genetic regions associated with aerobic adaptation is immensely required. We phenotyped a total of 39 stable EMS mutant lines of BPT 5204 (on the basis of yield and elite characters) (Source: Dr. M. Sheshu Madhav) for useful root related traits *viz*. root length, root volume, root dry weight at the panicle stage under aerobic systems of cultivation in 2017, 2018, 2019. The aerobic condition was maintained in polythene bags and one plant per bag was maintained in the controlled polyhouse condition (Barbadikar *et al.,* 2016). The roots of mutant lines along with wild type BPT 5204, aerobic cultivars MAS 946-1 and CR Dhan 201 were phenotyped at the panicle initiation stage, roots measured using centimeter scale, scanned for volume, diameter and related root measurements in WinRHIZO software followed by fresh and dry weight measurements in two biological replications (Phule *et al.,* 2018). The root length (cm) and volume (cm^3) were found to be higher for TI-17, TI-128, TI-112, TI-3, TI-124 and TI-128, TI-112, TI-17, TI-124, TI-166 (Plate/ Figure 1 and Figure 2). The root dry weight was found to be higher for TI-128, TI-112, TI-17, TI-19, TI-3, TI-124. The seedling vigor index (SVI) as a measure of root growth and establishment was also recorded at 14 and 21 days after germination using paper roll method in 2017, 2018 and 2019 in six biological replications (Addanki *et al.,* 2018). The lines *viz.* TI-128, TI-124, TI-112, TI-3, TI-87, TI-17 recorded higher seeding vigor index as calculated considering the seedling length (SVI-I) and dry weight (SVI-II). Overall, we found promising robust root traits mutant lines *viz*. TI-3, TI-7, TI-112, TI-124, TI-128 that exhibited high seedling vigor, root length, volume, dry weight as compared to BPT 5204 and CR Dhan 201, MAS 946-1 under aerobic condition. The mutant lines are being characterized on molecular levels for allelic variations. It is proposed that the mutant lines can be suitable for aerobic system of cultivation and can be deployed for breeding aerobic rice breeding programs.

References

Addanki, K., Balakrishnan, D., Yadavalli, V., Surapaneni, M., Mesapogu, S., Beerelli, K., & Neelamraju, S. (2019). Swarna × *Oryza nivara* introgression lines: A resource for seedling vigour traits in rice. Plant Genetic Resources: Characterization and Utilization, 17(1), 12-23.

Barbadikar KM, Phule AS, Sheshu Madhav M, Senguttuvel P, Subrahmanyam D, Balachandran SM, Ananda Kumar P (2016). Water scarcity: driving force for root studies in rice. ICAR-IIRR News Lett 14(1):7.

Phule, A.S., Barbadikar, K.M., Madhav, M.S. *et al.* Studies on root anatomy, morphology and physiology of rice grown under aerobic and anaerobic conditions (2019). *Physiol Mol Biol Plants* 25, 197–205.

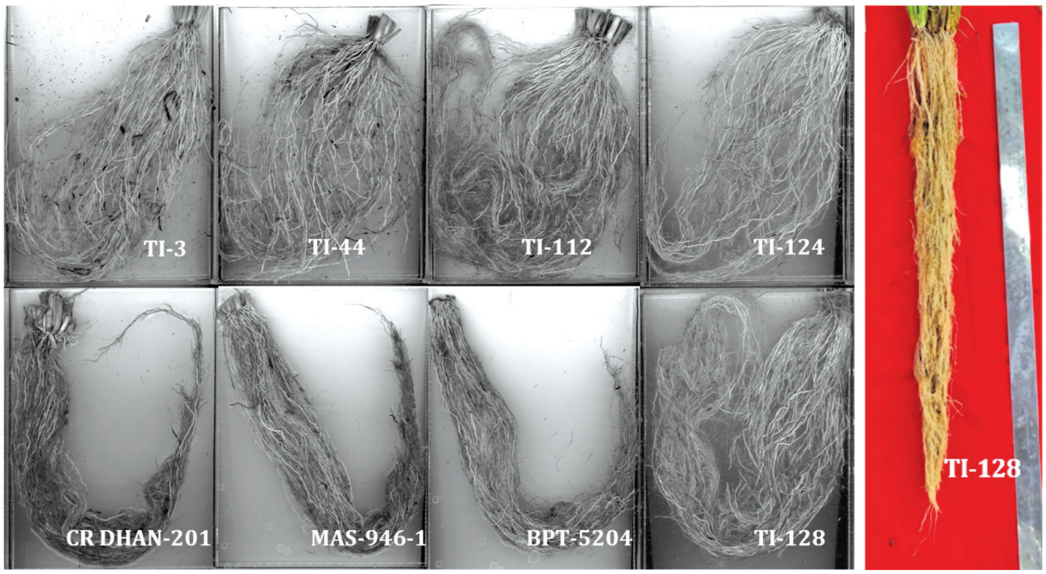

Fig. 1: Representative plate of roots under aerobic conditions scanned in WINRhizo at the Panicle initiation PI stage

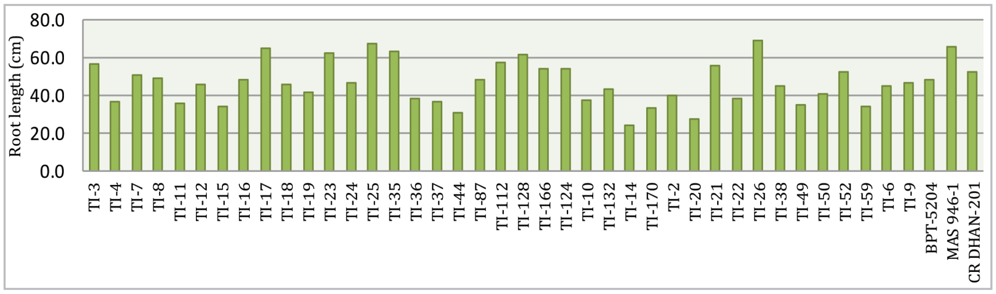

Fig. 2: Root length (cm) of mutant rice lines at panicle initiation stage (n=2)

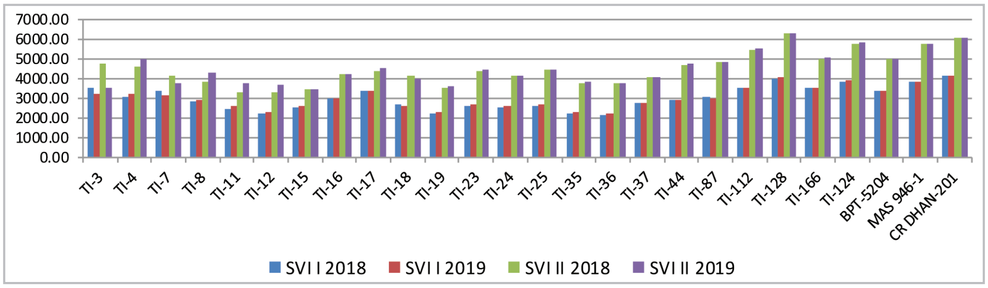

Fig. 3: Seedling vigor index I and seedling vigor index II of mutant rice lines at 21 days after germination. Each bar refers to SVI (n=6)

Acknowledgement: The work has been conducted under ICAR-IIRR Institute Research Council Project ABR/CI BT/15 (Molecular and functional characterization of useful root traits in rice) and DST-SERB ECR/2017/003133 (RNA-seq based mapping of robust root system architecture for identification of candidate genes)

Identification of novel sturdy culm genotypes for lodging resistance in rice

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Lodging is a serious problem limiting grain yield, productivity and grain quality in rice. Further, lodging poses hindrance to mechanical harvesting and increases harvesting and drying costs. Plant height, culm diameter and thickness, strength of upper and lower internodes, thickness of stem wall, lignin and cellulose accumulation in the stem wall, and panicle weight in turn by grain number are some of the morphological traits greatly

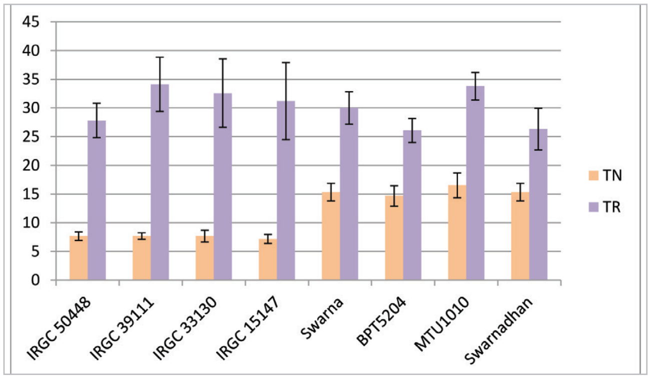


Fig. 1: Three years mean of the traits influencing bending stress in rice. Error bars indicate standard deviation across three years

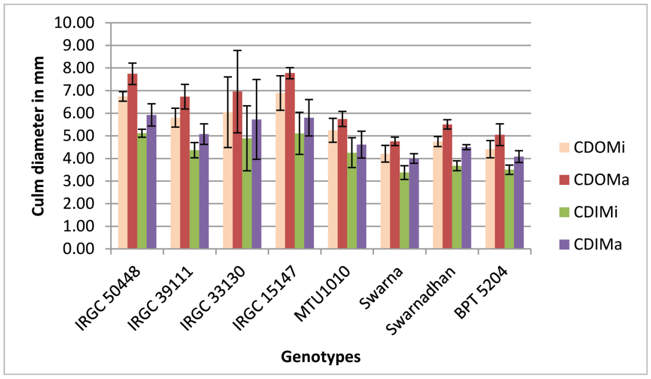


Fig. 2: Three year mean of culm outer and inner diameter on major and minor axes. Error bars indicate standard deviation across three years

Fig. 3: IRGC39111-Section cuttings and sturdiness in field

influencing lodging resistance in rice. In the present study, we evaluated tropical *japonica* accessions (TJP), *indica* cultivars and north eastern landraces along with 4 elite cultivars (Swarna, Samba Mahsuri, MTU 1010 and Swarnadhan) as checks for culm strength traits across three years (2016, 2017 and 2019).

Data on tiller number (TN), prostrate tester reading (TR), outer culm diameter on major axis (CDOMa), outer culm diameter on minor axes (CDOMi), inner culm diameter on major axis (CDIMa) and inner culm diameter on minor axis (CDIMi) were collected during 2016, 2017 and 2019. TN and TR provide a measure of bending stress (BS) while culm diameter is indicative of section modulus (SM). Culm strength is a measure of bending stress at breaking moment (M) influenced by both section modulus and bending stress. Based on three years data, we identified 10 strong culm genotypes comprising 7 tropical *japonica* accessions, one elite *indica* cultivar and 2 landraces with M value in the range of 1195 to 2655 g.f.

Molecular characterization using gene specific markers among the 10 strong culm genotypes revealed absence of *SCM2*, a known gene for strong culm indicating the possibility of presence of novel QTL/gene(s) for strong culm in 4 tropical *japonica* accessions viz., IRGC50448, IRGC43741, IRGC15147 and IRGC39111. A comparison of component traits of culm strength traits among the 4 TJP accessions and checks revealed that though there are no differences among them for TN and TR values (Fig. 1: and Table 1) but their combination greatly influenced bending stress values and in turn bending moment at breaking stress while the culm diameter has direct impact on strength (Fig. 2 and Table 1). Section cuttings and sturdiness of culm in IRGC39111 is given in figure 3. Owing to the higher M values (higher than Habataki) and absence of known *SCM2*, 4 tropical *japonica* accessions viz., IRGC50448, IRGC43741, IRGC15147 and IRGC39111 would serve as potential sources for novel QTL/gene(s) for strong culm. We have developed mapping populations between Swarna and IRGC39111 for use in QTL mapping studies of culm strength traits.

Table 1: Component traits of culm strength in rice genotypes

Genotype	Section Modulus (SM)				Bending Stress (BS)				Bending Moment at Breaking Stress (M) g.f			
	2016	2017	2019	Mean ± SD	2016	2017	2019	Mean ± SD	2016	2017	2019	Mean±SD
IRGC 50448	26.24	23.31	19.49	23.01±3.39	99.67	87.14	85.88	90.90±7.62	2615	2032	1674	2107±475
IRGC 39111	19.69	16.14	9.53	15.12±5.16	179.38	128.93	117.19	141.83±33.04	3532	2081	1117	2243±1216
IRGC 33130	5.69	20.73	19.30	15.24±8.30	80.31	137.31	106.76	108.13±28.52	457	2847	2061	1788±1218
IRGC 15147	21.34	25.61	27.20	24.72±3.03	125.77	115.63	85.20	108.87±21.11	2684	2962	2318	2654±323
MTU1010	6.58	7.59	11.77	8.65±2.75	69.75	48.17	43.68	53.87±13.94	459	366	514	446±75
Swarna	4.63	5.75	3.79	4.72±0.98	60.75	43.03	45.71	49.83±9.55	281	247	173	234±55
Swarnadhan	5.77	12.95	7.65	8.79±3.72	58.57	47.06	91.25	65.63±22.92	338	610	698	548±188
BPT 5204	3.73	8.34	5.54	5.87±2.32	45.38	44.75	65.53	51.89±11.82	169	373	363	302±115

Outreach activities

Farmers Field evaluation of new herbicide penoxsulam (2.67% W/W) OD along with DRR Dhan 46 and RPBio 226 for dry direct seeing condition in *kharif* 2020

Dr. B. Sreedevi, Principal Scientist, Agronomy has organized field evaluation program of new herbicide Penoxsulam (2.67% W/W) OD in dry direct seeding rice cultivation in Rangapur village, Vikarabad District, Telangana State, through DOT Centre, PJTSAU during *Kharif* 2020. As part of the demonstration program, seed of improved aerobic variety DRR Dhan 46 and RP Bio 226, pre-emergence herbicide Pendimethalin and post emergence herbicide Penoxsulam 2.67% W/W OD were distributed to the farmers. The farmers have sown the given varieties and applied both pre and post emergence herbicides as per the instructions and the crop is in active tillering stage.

Distribution of seed under IIRR-SCSP in Telangana

On 13th May 2020, Telangana Sona seed was distributed to one hundred SC farmers of Lingasanipally village of Bijnepalle Mandal of Nagarkurnool district of Telangana. On 21st May 2020, one hundred twenty farmers of Kummera and Karukonda villages of Nagarkurnool district were provided paddy seed under IIRR-SCSP.

On 23rd May 2020, seed was distributed to one hundred twenty farmers of Ranga Reddy district of Telangana. Seed was provided to one hundred eighty SC farmers of Pebbair, Wanaparthy district on 1st June, 2020 in collaboration with YFA KVK, Pebbair.

On 4th June 2020, seed was distributed to 100 farmers of Warangal

On 6th June 2020, Telangana Sona seed was distributed to 150 farmers of Bhongir and Ranga Reddy districts.

During 8-15th June 2020, Siddi seed procured from KVK, Wyra was distributed to 800 farmers of Khammam district

On 10th June 2020, BPT5204 seed was distributed to 160 farmers of Yadadri Bhuvangir district

On 17th June 2020, BPT5204 seed was distributed to 100 farmers of Mudigonda village, Deverakonda mandal of Nalgonda district.

On 25h June 2020, BPT5204 and KNM118 seed was distributed to 55 farmers of Karimnagar district in collaboration with KVK, Jammikunta.

Distribution of seed under IIRR-SCSP in Andhra Pradesh

Under the IIRR-SCSP, the mega variety- BPT5204 seeds were distributed to 370 farmers of Guntur district on 24th June, 2020.

వ్యవసాయాన్ని ప్రోత్సహించడం అభినందనీయం

అమృతలూరులో రైతులకు వరి విత్తన బస్తాలను అందజేస్తున్న వ్యవసాయాధికారులు, పార్టీ నేతలు

ఎస్సీ సబ్‌ప్లాన్ నిధులతో వరి విత్తనాల పంపిణీ

అమృతలూరు: వ్యవసాయ రంగాన్ని ప్రోత్సహిస్తూ, ఆ రంగానికి కేంద్ర, రాష్ట్ర ప్రభుత్వాలు పెద్దపీట వేయడం అభినందనీయమని పలువురు వక్తలు పేర్కొన్నారు. మండల కేంద్రం అమృతలూరులోని రైతు భరోసా కేంద్రం (ఆర్‌బీకే) వద్ద బుధవారం ఎస్సీ రైతులకు వరి విత్తనాలను ఉచితంగా పంపిణీ చేశారు. హైదరాబాద్ రాజేంద్రనగర్ వ్యవసాయ విశ్వ విద్యాలయానికి చెందిన వ్యవసాయ శాస్త్రవేత్త డాక్టర్ నిర్మల సౌజన్యంతో భారత విత్తనోత్పత్తి సంస్థ సహకారంతో ఎస్సీ సబ్‌ప్లాన్ నిధులతో అమృతలూరు గ్రామానికి చెందిన 250 మంది రైతులకు ఉచితంగా 250 బీపీటీ-5204(సాంబా మసూరి) విత్తన బస్తాలను పంపిణీ చేశారు. పంచాయతీ కార్యదర్శి బి. రమాదేవి సభాధ్యక్షతన జరిగిన కార్యక్రమానికి మండల వ్యవసాయాధికారిణి వి. లోకేశ్వరి, వైఎస్సార్ సీపీ జిల్లా పార్టీ ప్రధాన కార్యదర్శి రాపర్ల నరేంద్రకుమార్ పాల్గొని రైతులకు అందజేశారు. నరేంద్ర మాట్లాడుతూ రైతును రాజు చేయాలన్నదే లక్ష్యంగా కేంద్ర, రాష్ట్ర ప్రభుత్వాలు కృషి చేయడం అభినందనీయమన్నారు. దేశానికి వెన్నెముకగా అభివర్ధించే రైతుకు వెన్నుదన్నుగా ఉండేందుకు అనేక రైతు సంక్షేమ పథకాలు జాతీయ స్థాయిలో ప్రవేశపెట్టడం అమోఘమన్నారు. భారతీయ వరి పరిశోధన సంస్థ ఐఐఆర్‌ఆర్ ప్రతినిధి విజయ్‌కుమార్ అభివృద్ధి కార్యక్రమాలను వివరించారు. అంబటి రామ్మోహనరావు, పోతార్లంక సురేష్, కట్టుపల్లి రాంబాబు, బర్మా ప్రవీణ్, ఆర్‌బీకే సిబ్బంది పాల్గొన్నారు.

సాక్షి Thu, 25 June 2020 https://epaper.sakshi.com/c

Under SCSP Project

సమగ్ర సస్యరక్షణతోనే అధిక దిగుబడి

నగరి : సమగ్ర సస్యరక్షణ ద్వారా అధిక దిగుబడులు సాధించవచ్చని ఇండియన్ ఇన్‌స్టిట్యూట్ ఆఫ్ రైస్ రీసెర్చ్ సీనియర్ శాస్త్రవేత్తలు బి. నిర్మల, డాక్టర్ ఆర్. మహేంద్రకుమార్ అన్నారు. బుధవారం మండలంలోని గుండ్రాజుకుప్పం గ్రామంలో రాస్ కృషి విజ్ఞాన కేంద్రం, భారత వరి పరిశోధన సంస్థ సహకారంతో షెడ్యూల్డ్ కులాల ఉప ప్రణాళికలో భాగంగా నిర్వహించిన వరిలో సమగ్ర సస్యరక్షణ క్షేత్రదినోత్సం కార్యక్రమంలో వారు పాల్గొన్నారు. గ్రామంలో సాగులో ఉన్న వరి పైరును వారు సందర్శించారు. వారు మాట్లాడుతూ పరిశోధన సంస్థ నుంచి విడుదల చేసిన వరి వంగడాలు, వాటి పురోగతి గురించి వివరించారు. వరిలో మంచి సమగ్ర సస్యరక్షణ పాటించడం ద్వారా అధిక దిగుబడులు పొందవచ్చన్నారు. మంచి వంగడాలు, భూసార పరీక్ష ఆధారిత ఎరువుల వాడకం, కాలిబాటలు తీయడం, సరైన మోతాదులో సరైన సమయంలో ఎరువుల వినియోగం వంటి పద్ధతులు అవలంభించడం ద్వారా వరిలో అధిక దిగుబడులు పొందవచ్చన్నారు. తక్కువ ఖర్చు, తక్కువ పంటకాలంలో దిగుబడి వచ్చే యాంత్రీకరణ పద్ధతి, శ్రీవరి, డ్రమ్‌సీడర్ వాడి నేరుగా విత్తే పద్ధతిని అలవాటు చేసుకోవాలని సూచించారు. వరిలో ఆకురంగు పత్రం వినియోగం, నత్రజని ఎరువుల వాడకాన్ని రైతులకు వివరించారు. రాస్ కేవీకే సీనియర్ శాస్త్రవేత్త డాక్టర్ ఎస్. శ్రీనివాసులు మాట్లాడుతూ షెడ్యూల్డ్ కులాల ఉపప్రణాళికలో చేపడుతున్న కార్యక్రమాలను వివరించారు. వ్యవసాయ అధికారి యామిని వరిలో పురుగు, తెగుళ్ల యాజమాన్యం గురించి వివరించారు. మండల వ్యవసాయ విస్తరణ అధికారి శరవణ, కేవీకే శాస్త్రవేత్తలు డాక్టర్ వి.దివ్య, టి.రామ్‌కుమార్, గ్రామ సచివాలయ సిబ్బంది, వలంటీర్లు, రైతులు పాల్గొన్నారు.

వరిసాగును పరిశీలిస్తున్న శాస్త్రవేత్తలు

"నమస్తే తెలంగాణ"

వ్యవసాయ రంగానికి ప్రభుత్వాల అండ

రాయపర్తి : వ్యవసాయ రంగానికి కేంద్ర, రాష్ట్ర ప్రభుత్వాలు అండగా నిలుస్తున్నాయని మండలంలోని పెర్కవేడు సర్పంచ్ చిన్నాల తారాశ్రీ అన్నారు. రాజేంద్రనగర్ వ్యవసాయ విశ్వ విద్యాలయానికి చెందిన వ్యవసాయ శాస్త్రవేత్త డాక్టర్ నిర్మల సౌజన్యంతో భారత విత్తనోత్పత్తి సంస్థ సహకారంతో ఎస్సీ సబ్ ప్లాన్ నిధులతో గ్రామానికి చెందిన 50 మంది రైతులకు ఉచితంగా 50 తెలంగాణ సోనా విత్తన బస్తాలను సర్పంచ్ శనివారం పంపిణీ చేశారు. ఈ సందర్భంగా ఆమె మాట్లాడుతూ.. తెలంగాణలో రైతును రాజు చేయాలన్నదే ముఖ్యమంత్రి కేసీఆర్ ప్రధాన ధ్యేయమన్నారు. కార్యక్రమంలో రైతులు చిన్నాల రాజబాబు, భాస్కర్, కిరణ్, సాయిలు పాల్గొన్నారు.

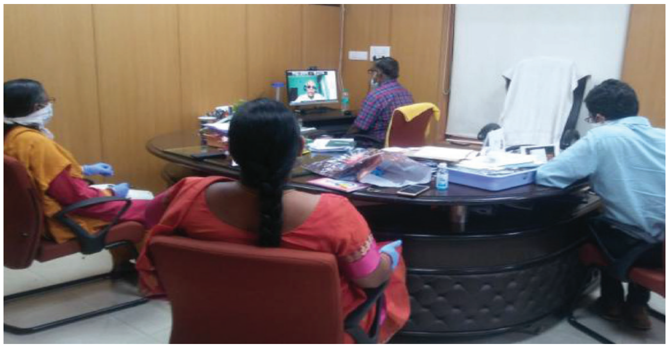
విత్తన బస్తాలను అందిస్తున్న సర్పంచ్ తారాశ్రీ

Panorama of Institute Activities

Section wise AICRP group meetings were held in virtual mode

AICRIP Soil Science Group meetings – 3rd June, 2020

AICRIP Agronomy Group meetings – 3rd June, 2020



AICRIP Pathology Group meetings – 3rd June, 2020

AICRIP Entomology Group meetings – 3rd June, 2020

AICRIP Physiology group meeting 19th June, 2020

Staff News

Promotions

- Dr. Santhosha Rathod, Scientist has been promoted to next higher grade in PB of Rs. 15600-39100+RGP of Rs. 7000/- (Level-11) w.e.f. 01.07.2018 vide 0.05-154/ Admin/2020 dated 12.05.2020.
- Mrs. Sudha Nair was promoted to Assistant Administrative Officer w.e.f. 26.06.2020..

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