



# IIRR



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### Insights into rice IPM

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Integrated Pest Management (IPM) provides the ideal ecologically sound framework for managing pests. IPM is not only about managing 'pests' but also pesticides, parasites, predators, pathogens and most important of all, stakeholders linked to farming. IPM strategies have evolved over the years from reliance on single approach of chemical control to the present multi-faceted approach aided by the synergy of developments in scientific research and discoveries related to biotechnology and other fields, concomitant changes on market and environment policy fronts to make it safe and profitable for the farmers. The evolution and development of different components of IPM available for adoption across rice systems are:

#### Pest diagnostics and surveillance

Pest diagnostics along with surveillance forms the most vital cog of rice IPM strategy. Remote microscopy diagnosis (RMD) and Bar coding techniques have eased

reliable identification and delineation of pest or disease and their damage from nutrient disorder symptoms. Semio-chemicals have replaced conventional light traps for accurately monitoring pest populations.

In situations where it is not possible to prevent pest attacks, pest forewarning systems aided by Geographical information system (GIS) and weather driven pest distribution maps are being developed to provide real

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time action advisories to farmers as part of decision support system.

### Host Plant Resistance (HPR)

Resistant varieties are the most efficient, economical and practical tools for encountering the pest problems and are ideally compatible with other components of IPM. Also, due to changing pest scenario and situations of altered pest profiles in different cropping systems, multiple pest resistant varieties are being developed for cultivation by farmers to tackle multiple stresses rice cultivation.

Transformation of plant systems with expression of multiple toxins in transgenic plant varieties through gene stacking and DNA marker technology to tag and map several major resistance genes, has also been successful. Disrupting gene function by the use of *RNAi* and CRISPR/Cas9-based gene editing system have been other exciting means of exploiting genome intelligence for resistance breeding.

### Cultural management

Appropriate manipulation of cultural practices helps small and marginal farmers to indirectly suppress pest populations through resource use efficient techniques. Simple practices like early and synchronous planting can help in either escaping pest damage, while water management and field sanitation measures take care of biotic stresses through the removal of alternate hosts or creating conditions difficult for pest survival.

Integrated soil health and plant nutrient management strengthens plant system through induced resistance to withstand the insect populations and enable the plants to yield well despite stress impacts, while also resulting in a substantial reduction of pesticide use. Split application of Nitrogen along with use of slow release fertilisers such as Neem coated urea help to lower pest incidence and realize higher yields. Use of leaf colour charts is recommended for optimized use of nitrogenous fertilizers. Application of organic manures like FYM or vermicompost facilitates build-up of beneficial populations of detritivorous and plankton feeders as well as pest antagonists. Precision farming based aided by GIS and global positioning system (GPS) is another new dimension initiative for efficient soil and plant health management.

### Conservation and utilization of bio-control agents

The rich and diverse wealth of beneficial biological control agents and their natural *in-situ* interactions in rice ecosystems can be exploited as key components of IPM. Bio-intensive pest management strategies (BIPM) focus on measures to restructure the agricultural ecosystem towards conservation of natural enemies to the disadvantage of a pest.

Habitat manipulation through naturally innovative strategies such as use of trap crop and ecological engineering can protect rice crop with minimum damage to the environment.

### Behaviouristic manipulations using sex pheromones

Semio chemicals (sex pheromones) have been found promising for the management of YSB, in monitoring and direct control through male annihilation by mass trapping. The rationale of pheromone mediated mass trapping technique is to place enough traps to concentrate pest insects into a restricted space (catch enough males) and leave the females of the species without mates. Mass trapping technique offers great promise against monophagous pests like YSB, particularly in areas where the crop is cultivated extensively and contiguously.

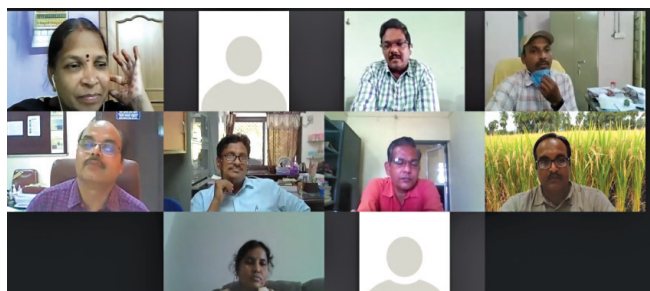
### Chemical management

Chemical pest management with its curative effects and ease of application continues to be an important choice of the farmers. Regular screening and evaluation of newer insecticide molecules have enabled in the identification of suitable chemical options in different cropping system regimes depending on pest prevalence. Newer environment friendly chemicals with novel modes of action and effectiveness at very low doses have fitted well into rice IPM programmes. However, for effective chemical use, the correct choice of active ingredient, suitable formulation, time of application and application techniques need to be made based on pest biology and crop phenology. Nano-pesticides or Nano-encapsulated pesticides are the potential options for the targeted delivery of pesticides. Ongoing research on the uses of unmanned aircraft (drones) for application of pesticides and fertilizers provides the scope of using chemicals in more effective and environment friendly manner.

Use of bio-pesticides and botanical pesticides though advocated as environment friendly component of IPM, is another potential area in the light of new developments in advanced chemistry and formulation technology. Indigenous technical knowhows (ITKs) can also be exploited in specific farmer-friendly situations as has already been in vogue in North Eastern region. Newer analytical standardization tools can improve and refine their performance as effective, cheap and widely available alternative products for ready use by farmers.

*[Dr Katti officially interacted with all the Entomology AICIRP co-operators on 28<sup>th</sup> Sep, 2020 before his retirement and gave his insights into rice IPM based on his experience.]*

### General Body Meeting of Society for Advancement of Rice Research (SARR)



A general body meeting (GBM) of SARR was held in virtual mode on 22<sup>nd</sup> September, 2020 chaired by the President - SARR and Director - IIRR, Dr. S.R. Voleti. The agenda items included briefing about previous GBM proceedings, Dr. S.V.S. Shastry memorial lecture series and by remarks by two veteran rice scientists of IIRR who are retiring this year, viz., Dr. Gururaj Katti, Principal Scientist & Head, Entomology and Dr. S.M. Balachandran, Principal Scientist & Head, Biotechnology.

### Varietal releases, Copy rights, ITMU activities and Genetic stocks

#### CVRC

84<sup>th</sup> Central Sub-Committee on Crop Standards, Notification and Release of Varieties for Agricultural Crops (CVRC) was held through video conferencing on 10<sup>th</sup> July, 2020 under the chairmanship of Dr. T.R. Sharma, DDC (CS), ICAR. Of the 33 proposals approved for release/notification, 2 are hybrids and 29 are varieties.

- Previously deferred 4 proposals (2 hybrids and 2 varieties) were approved after revision and recommended for release. Of them one is a central release and 3 are state releases.

#### Dissemination of IPM

Modern IPM involves knowledge loaded and technology intensive solutions, hence ICT tool should be suitably exploited to make it user friendly for the farmers. In addition to CD-ROMS, manuals and videos, new ICTs such as mobile phones and internet associated applications should be utilised in the experiential learning processes such as participatory farm research and farmers field schools to speedily connect the farmer clientele to IPM technology.

Dr. Gururaj Katti shared his experiences of working in rice for the last 25 years in general and working in AICIRP as PI, Entomology, in particular. He said that SARR played a supportive role in rice research and development since its inception in 2005. Dr. S.M. Balachandran shared his experiences of initiating biotechnology program at IIRR and in rice research.

Dr. R.M. Kumar gave a brief presentation about action taken report (ATR) of last GBM proceedings that was accepted by all the members of the society. This was followed by the presentation of Editorial Committee report by Dr. Ch. Padmavathi. She presented about the number of manuscripts received and published in Issues 1 & 2 of Volume 12, 2019 JRR. Dr. B. Nirmala, Treasurer, SARR made a presentation of the financial report for the period 2019-20.

- 4 proposals through CVRC were approved and recommended for release including 3 from NRRI and 1 from IARI.
- 23 proposals for State releases were approved, which included 9 for Andhra Pradesh, 3 each for Telangana and Odisha, 2 each for Tamil Nadu and Chhattisgarh and 1 each for Assam, Uttar Pradesh, Maharashtra and Gujarat.
- 2 proposals (SAVA 127 and US 382) submitted for area extensions to Assam were approved.

### Copyright registered

- A copy right was registered (SW/13541/2020) on July 16, 2020 for the software “A web based Radiation Use Efficiency Calculator for Rice Genotypes”.

This software was specifically designed to compute rice genotype-wise Radiation Use Efficiency at different stages of rice crop for different locations spread across India. Rice genotypes can be assessed easily for efficient RUE and yield at different stages of rice crop using this software. The software prompts for minimum input parameters and facilitates the computation of RUE across locations at different stages of rice crop. The data generated by this software can be easily copied to excel and can be used for further analysis with other datasets. This software is easily understandable and user friendly. This is currently available in the IIRR website (<http://www.icar-iirr.org>).

### ITMU Activities

- Dr. M. Sheshu Madhav, Principal Scientist (Biotechnology) & Chairman of ITMU, IIRR attended online workshop-cum-training on “Intellectual Property Rights in Agricultural Research & Education in India” during 12-28 September, 2020, organized by National Agricultural Higher Education Project (NAHEP) and Intellectual Property & Technology Management (IP&TM).
- Virtual online Meeting conducted with Agrinnovate India Limited on 29<sup>th</sup> July, 2020 for commercialization of Improved Samba Mahsuri rice variety.
- Virtual online meeting conducted with Agrinnovate India Limited on 14.09.2020 for commercialization of ICAR-IIRR developed Rice Based Health Care Products (1) Rice Riche Pain Relieving Gel (2) Rice Riche Cream for Cracked Heel and Dry Skin (3) Rice Riche Moisturizing Lotion and (4) Rice Riche Face Scrub.
- Dr. M. Sheshu Madhav, Principal Scientist (Biotechnology) & Chairman of ITMU, IIRR participated online Review on Progress on ZTMC Activities and One Day Workshop on ‘IPR & Technology commercialization: Status and Opportunities in ICAR, organized by ICAR-IIMR, Hyderabad on Sep 15, 2020.

### Genetic Stocks

The XXXX<sup>st</sup> meeting of Plant Germplasm Registration Committee (PGRC) was held on 29<sup>th</sup> Sep, 2020 on virtual mode at ICAR-NBPGR, New Delhi under the Chairmanship of Dr. T.R. Sharma, DDG (CS), ICAR. In the meeting, it was decided to broaden the scope of review of proposals. In addition to crop specific ADG/Director, proposals will be reviewed by three subject experts and PGRC meetings will be held quarterly. Of the 78 proposals approved for registration in 38 species, four were belonging to rice crop with two rice lines from ICAR-IIRR. Dr Jyothi Badri represented ICAR-IIRR in the PGRC meeting.

- INGR20001- A derivative of Sambha Mahsuri, which is tolerant to high temperature.
- INGR20003- A derivative of Madhukar / Swarna recombinant inbred line (RIL) having high Zinc in its grains.

## Salient features of the registered genetic stocks

### GQ-25 (INGR20001) – Restorer line with high NUE and high temperature stress tolerance (+4 °C > ambient temperature)

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GQ-25 (Samba Mahsuri/SC5126-3-2-4) is a restorer line developed by Hybrid Rice Division, ICAR-Indian Institute of Rice Research in NICRA project (<http://www.icar-iirr.org:8000/>), GQ-25 is identified as one of the promising

genotypes under low nitrogen (N) field condition as expressed in terms of grain yield (filled grain weight per hill) and also for terminal high temperature stress tolerance (in terms of stable grain yield under high temperature stress).



GQ-25 is a medium duration restorer line with 103-105 days to 50% flowering and medium slender grain type.



### Morpho-agronomic Characteristics

**Table 1: Agro-morphological, yield and NUE characters of GQ-25 under low N field condition\* at IIRR (Srikanth, 2015; Neeraja, 2019)**

Traits under Low N condition	
Plant Height (cm)	105
Tiller Number	11.33
Productive Tiller Number	8.33
Single Plant Yield# (grams) (year 1 and 2)	14.8; 15.4
1000 grain weight (grams)	19.97
Harvest Index	44.72
N% in Straw	0.35
N% in Grain	1.15
N% in Biomass	1.50
Agronomic Efficiency (AE) (kg/kg)	-47.45
Physiological Efficiency (PE) (kg/kg)	120.71
Agro Physiological Efficiency (APE) (kg/kg)	96.44
Apparent Recovery Efficiency (ARE) (%)	-50.49
Utilization Efficiency (UE) (kg/kg)	-61.46
Grain Yield Efficiency Index (GYEI)	0.79

**Table 2: Agro-morphological and yield characters of GQ-25 under ambient and high temperature stress condition across the locations under AICRIP Plant Physiology trial**

Trait	Grand Mean across the locations			
	2015 <sup>a</sup>		2016 <sup>b</sup>	
	Control	HTS	Control	HTS
Days to 50% Flowering	104	103	96	96
Days to Maturity	132	133	129	128
Grain Yield (grams/m <sup>2</sup> )	487	361	489.50	366.25
Total dry matter (grams /m <sup>2</sup> )	1182.75	1081	1192	1143.25
1000 grain weight (grams)	20.9	20.8	22	20

### Associated Characters and Cultivated Practices

**NUE:** GQ-25 is found to be promising across the seasons and years since 2011 (DRR Newsletter, 2013; Venkateswarlu, 2013; DRR Annual report, 2013) under low N field condition in terms of yield, yield related components and Nitrogen Use Efficiency (NUE) indicators among the evaluated genotypes.

**N metabolism genes expression analysis in GQ-25:** Up regulation of *OsAMT1;1* gene was observed in shoot (86%) and root (63%) of GQ-25 under hydroponics (Srikanth, References cited in text ate not mentioned 2015) and down regulation of *OsNIA2* gene in GQ-25 in root (64.5%) and up-regulation by 11.13% in shoot (11%) under field condition (Srikanth, 2016) were observed in low N in comparison to recommended N.

**High Temperature Stress:** GQ-25 was evaluated for terminal high temperature stress tolerance in AICRIP Plant Physiology trials during 2015 and 2016 across the locations [Chinsurah (CHN), Hyderabad (IIRR), Maruteru (MTU), Pantnagar (PNT), Pattambi (PTB), Rewa (REW) and Titabar (TTB)]. During 2015, GQ-25 yielded 361 g/m<sup>2</sup> under high temperature stress (CHN, IIRR, MTU, REWA, TTB) with 25% reduction over the ambient temperature (IIRR, 2016). Similar trend of yield reduction (25%) was also observed during 2016 for GQ-25 with the mean yield of 366.25 g/m<sup>2</sup> under high temperature stress (IIRR, MTU, REWA, PTB, IIRR, 2017). Based on the Yield Stability Index (YSI) values, GQ-25 was selected as heat tolerant and showed non-significant stability variance ( $\sigma^2$ ) (IIRR, 2017).

## INGR20003 [IC0635010, I ET 23814 (RPBio5478-185M)] rice with high zinc in grains

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INGR 20003 [IET 23814 (RPBio5478-185M)] is an elite rice line with high grain zinc concentration in both brown (33.5ppm Zn) and polished (31 ppm Zn) grain. It is a recombinant inbred line (RIL) identified from the cross Madhukar x Swarna at IIRR, Hyderabad as part of project 3019 of ICAR-Network Project on Functional Genomics and Genetic Modification of crops (NPFGGM, previously NPTC). It showed the highest overall grain zinc concentration of 27.38 ppm in brown rice in 2013 and 31.69 ppm in polished rice across 17 locations in 2014 in AICRIP- Bio-fortification trials of 2013 and 2014 (AICRIP 2013, 2014; Agarwal *et al*, 2018) (Table 1). It showed the highest overall grain zinc concentration (30.62 mg/Kg) in brown rice among the 68 lines tested in a combined analysis of 15 trials in 3 years and a mean grain yield of 3.08 t/ha at 6 other locations with high and low soil zinc (Naik *et al.*, 2020).

INGR 20003 has purple basal leaf sheath, leaves and panicles. It is 129 cm tall, shows 50% flowering in 98 days to 107 days (Naik *et al.*, 2020) and has long bold grains with white pericarp (Fig. 1). The range of Fe in this high zinc line was 7.64 to 14.73 mg/Kg in brown rice across 15 locations in 3 years and was considered among the 5 best breeding lines with high Zn or high Fe or both (Naik *et al.*, 2020). In the presence of ascorbic acid, 185M showed higher bio-availability of Fe (2 times) and Zn (3 times) than in Swarna (Raghu *et al.*, 2019). It shows 62% head rice recovery and good cooking quality traits such as alkali spreading value 4, amylose content 24.48% and gel consistency 50 mm (AICRIP, 2013). It showed moderate resistance to sheath blight, blast, neck blast, sheath rot and tungro diseases (AICRIP, 2013).

**Table 1: Mean Iron and Zinc concentration in unpolished / polished rice of 185M in AICRIP Bio-fortification trials 2013, 2014 and as reported by Naik *et al*, (2020)**

S. No.	Identity	AICRIP Bio-fortification trial-2013 (polished rice)*			AICRIP Bio-fortification trial -2014 (polished rice)*			Naik <i>et al</i> , (2020) mean of 15 trials in 3 years (2014, 2015, 2016) in unpolished rice*		
		Zn (ppm)	DFF (days)	Yield (t/ha)	Zn (ppm)	DFF (days)	Yield (t/ha)	Zn (ppm)	Dff (days)	Yield (t/ha)
1	<b>185M (IET23814 RPBio5478-185M)</b>	20.56	99	2.45	31.69	98	2.72	30.62	107	3.08
2	Kalanamak micronutrient check	16.23	105	3.08	18.29	103	3.01	-----	-----	-----
3	Chittimuthyalu micronutrient check	15.78	109	2.38	21.49	104	3.29	-----	-----	-----
4	BPT 5204 yield check	15.29	109	3.95	15.51	112	4.19	22.8	114	3.24

DFF- days to 50% flowering; *dff*- days to 40% flowering, \*In 2013, Out of 12 entries across 5 zones in 17 locations 185M showed overall mean value of highest zinc 27.38 ppm in brown and 20.56 ppm in polished rice (AICRIP annual report 2013 vol. 1 – 1.465). In 2014, out of 45 entries in 17 locations 185M showed overall mean value of highest zinc 31.69 ppm in polished rice (AICRIP Annual Report 2014. Vol.1 – 1.572).



**Fig. 1: 185M plants with purple leaves, panicles and seeds with and without husk**



## New Research Projects Initiated at ICAR-IIRR-Externally funded

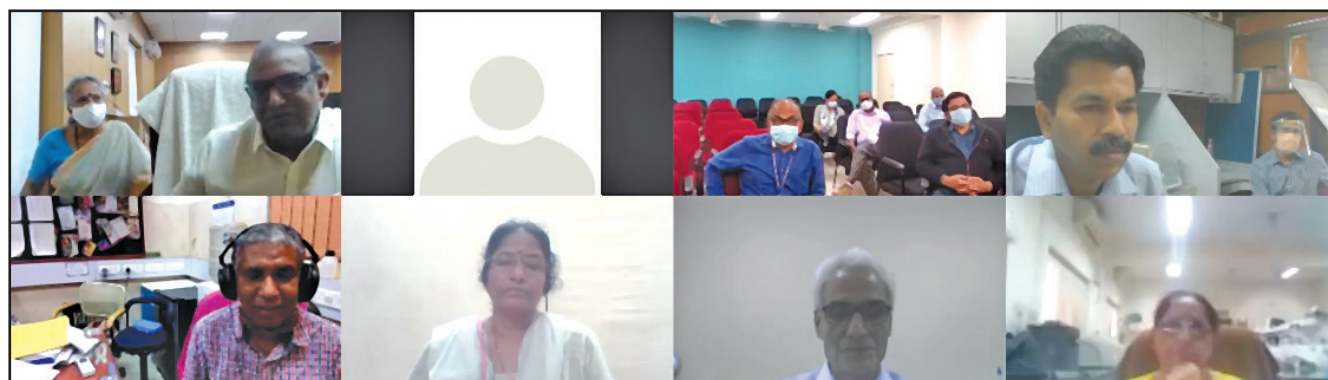
S. No.	Title of the Project	Investigators	Date of start	Duration	Budget	Funding Agency
1	UKRI Global Challenge Research Fund (GCRF) for South Asian Nitrogen Hub (SANH) (Co PI): Work Package (WP) 2.1b- Work Package Title: Experimental testing of agronomic & genetic solutions across South Asia	PI: Dr. D. Subrahmanyam, Co-PIs: Drs. C. N. Neeraja, S.R. Voleti, K. Surekha and K.M. Barbadikar	21.08.2020	5 years	(92187 GBP)	DBT-UKRI

## Research Project Reviews

### CRP on Bio-fortification

Internal Review of CRP Bio-fortification 2017-2020 by the Coordinator was held through video conferencing on 14<sup>th</sup> August, 2020: A meeting to review the progress of CRP on Bio-fortification in selected crops for nutritional security was held on 18<sup>th</sup> August, 2020 under the Chairmanship of Dr. T.R. Sharma, DDG (CS), ICAR. Dr. H.S.

Gupta, Former Director General, BISA and Director, IARI, and Dr. H.S. Balyan, Senior Scientist, INSA were invited as external experts. Dr. D.K. Yadava, ADG (Seed), Dr. S.R. Voleti, Director, IIRR, Hyderabad & Coordinator, Dr. Sujay Rakshit, Director, IIMR, all the crop PIs and scientists from collaborating centres participated in the review meeting.



## Outreach

### Distribution of bio-fortified rice variety 'DRR Dhan 48' in Yadadri-Bhuvangiri district

DRR Dhan 48, a bio-fortified rice variety with high zinc content of (22 ppm), resistance to bacterial blight and fine medium slender grain type was given for seed production in farmer's field in Aroor village of Valigonda mandal, Yadadri Bhongir district, Telangana by Dr. Jyothi Badri on 11<sup>th</sup> July, 2020.



### Outreach activities undertaken under IIRR-SCSP

Distribution of inputs under IIRR-SCSP Program in Khammam District

Monitoring of crop trials under IIRR-SCSP program

Under the IIRR-SCSP Program, awareness was created among farmers on pest and disease management practices in rice and critical input sprayers were distributed to 80 farmers of Kokkireni village of Khammam district of Telangana on 18<sup>th</sup> July, 2020.





### Monitoring of crop trials under IIRR-SCSP program

The crop trials on improved variety were monitored under the SCSP demonstrations at Venkatayapalem and Pallegudem villages of Khammam district of Telangana on 29/08/2020. The need for adoption of ‘Good Agricultural

Practices’ was emphasized to achieve better yields under farmers’ field conditions. Drying sheets were distributed to the SC beneficiary farmers. A farmer-scientist interaction was organised on the various issues related to rice production.



### DST sponsored project- “Technological empowerment of tribal farm women through Good Agricultural Practices in Deverakonda Mandal of Nalgonda”



The project envisages empowering tribal farm women through Good Agricultural Practices. Demonstrations on importance of line sowing were undertaken on fields of

tribal farm women on 26<sup>th</sup> August, 2020 at Deverakonda, Nalgonda.

### Demonstration of Bowman’s Water Pipes on farmers’ field dated 25<sup>th</sup> July, 2020



Water saving in rice cultivation assumes greater importance to conserve the scarce water resource. Demonstration on use of Bowman’s water pipe were taken up on fields of tribal farm women at Korra thanda, Achamkunta Thanda, Girija nagar, Rollabanda Thanda

and Marrichettu Thanda of Devarakonda mandal, Telangana State. The experiment was laid out in 0.5 acres each in traditional flooding (TF) and Alternate Wetting and Drying (AWD) system of water management.



## National Seed Project - Breeder Seed production

Drs. A.V.S.R. Swamy and L.V. Subba Rao visited various villages in Telangana to distribute varieties and sprayers and monitor breeder seed production under National Seed Project - Breeder Seed production - Tribal Sub Plan. On 13<sup>th</sup> and 18<sup>th</sup> July, 2020, visited Kothakota village, Mahboobnagar and Mylaram Village, Vikarabad, respectively to monitor Breeder Seed production. On 24<sup>th</sup> August, 2020, they distributed sprayers and Tarpaulin to

tribal farmers through Banjara Raithu Seva sangham and also visited Potugadda Thanda and distributed Improved Samba Mahsuri and other released varieties of IIRR. ICAR-IIRR in association with Banjara Rythu Seva Sangham, Mujahidpur, Vikarabad District conducted farmers meet at Pottigaddathanda, Mujahidpurmandal, Vikarabad District on 24<sup>th</sup> Aug, 2020.

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### విత్తన ఎంపికలో జాగ్రత్తలు అవసరం

కుల్చపర్ల గ్రామీణ, న్యూస్ టుడే: రైతులు మేలైన విత్తన రకాలను ఎంచుకోవాలని హైదరాబాద్ లోని భారతీయ పరి పరిశోధన సంస్థకు చెందిన శాస్త్రవేత్తలు ఏవిఎస్ఆర్. స్వామి, సుబ్బారావు, గోవర్ధన్ తెలిపారు. పోటిగడ్డతండాలో పర్యటించి రైతులకు ఇంస్ట్రావ్ సాంబా మసూరి పరి విత్తనాలను అందించారు. జాతీయ విత్తనోత్పత్తి పథకం ద్వారా గిరిజన అభివృద్ధి ఉప ప్రణాళికలో భాగంగా జిల్లాలోని గిరిజన రైతులకు ఇంస్ట్రావ్ సాంబా మసూరి విత్తనాలను అందిస్తున్నామన్నారు. ఈ విత్తనాలు ఎండాకు తెగులును తట్టుకుని 135 నుంచి 140 రోజుల్లో పంటకు వస్తుందన్నారు. ఉప సర్పంచి రాజునాయక్, వార్డు సభ్యురాలు లక్ష్మి, రైతు సంఘం అధ్యక్షుడు రాములు పాల్గొన్నారు.

02-Jul-20 | Pg 01



### విత్తన ఎంపికలో జాగ్రత్తలు అవసరం

కుల్చపర్ల గ్రామీణ, న్యూస్ టుడే: రైతులు మేలైన విత్తన రకాలను ఎంచుకోవాలని హైదరాబాద్ లోని భారతీయ పరి పరిశోధన సంస్థకు చెందిన శాస్త్రవేత్తలు ఏవిఎస్ఆర్. స్వామి, సుబ్బారావు, గోవర్ధన్ తెలిపారు. పోటిగడ్డతండాలో పర్యటించి రైతులకు ఇంస్ట్రావ్ సాంబా మసూరి పరి విత్తనాలను అందించారు. జాతీయ విత్తనోత్పత్తి పథకం ద్వారా గిరిజన అభివృద్ధి ఉప ప్రణాళికలో భాగంగా జిల్లాలోని గిరిజన రైతులకు ఇంస్ట్రావ్ సాంబా మసూరి విత్తనాలను అందిస్తున్నామన్నారు. ఈ విత్తనాలు ఎండాకు తెగులును తట్టుకుని 135 నుంచి 140 రోజుల్లో పంటకు వస్తుందన్నారు. ఉప సర్పంచి రాజునాయక్, వార్డు సభ్యురాలు లక్ష్మి, రైతు సంఘం అధ్యక్షుడు రాములు పాల్గొన్నారు.



## Panorama of Institute Activities

### हिंदी चेतना मास समारोह

भाकूअनुप - भारतीय चावल अनुसंधान संस्थान, हैदराबाद में 14 सितंबर से 13 अक्टूबर, 2020 के दौरान हिंदी चेतना मास समारोह का आयोजन किया गया। डॉ. गुरुराज कट्टी, प्रभारी निदेशक, भाचाअनुसं ने आभासी (वर्चुअल) रूप में 14 सितंबर, 2020 को उक्त समारोह के उद्घाटन की घोषणा की। डॉ. महेश कुमार, वरिष्ठ तकनीकी अधिकारी (राजभाषा), भाकूअनुसं एवं प्रभारी, हिंदी कक्ष, भाचाअनुसं ने समारोह में उपस्थित लोगों का स्वागत किया तथा हिंदी दिवस एवं राजभाषा हिंदी के महत्व पर प्रकाश डालते हुए हिंदी चेतना

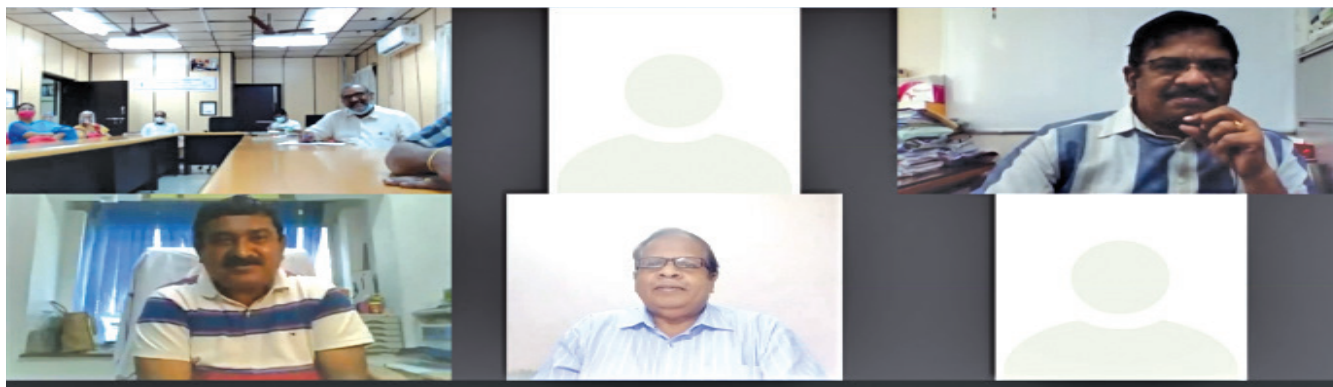
मास समारोह से संबंधित जानकारी प्रदान की। उन्होंने हिंदी दिवस के अवसर पर जारी श्री नरेन्द्र सिंह तोमर, माननीय केंद्रीय कृषि एवं किसान कल्याण मंत्री के संदेश का वाचन किया तथा डॉ. त्रिलोचन महापात्र, सचिव, कृषि अनुसंधान एवं शिक्षा विभाग तथा महानिदेशक, भारतीय कृषि अनुसंधान परिषद के द्वारा जारी अपील (वीडियो) का प्रदर्शन भी किया। श्रीमती वनिता, प्रवर श्रेणी लिपिक ने श्री कैलाश चौधरी, माननीय केंद्रीय कृषि राज्य मंत्री जी के संदेश का वाचन किया।



डॉ. कट्टी ने इस अवसर पर अपने संबोधन में कहा कि हमें संपर्क भाषा का दायित्व निभा रही हिंदी का उपयोग करने में झिझक महसूस नहीं करनी चाहिए और हमें टिप्पण व मसौदा लेखन में उसका ज्यादा से ज्यादा उपयोग करना चाहिए। इसके अलावा उन्होंने बताया कि कोई भी भाषा सीखना हमारे लिए लाभप्रद ही होता है। उन्होंने इतनी विकट परिस्थितियों में भी हिंदी चेतना मास का आयोजन करने हेतु संबंधित कार्यकर्ताओं की सराहना भी की और कहा कि हमें उक्त मास के दौरान आयोजित प्रतियोगिता

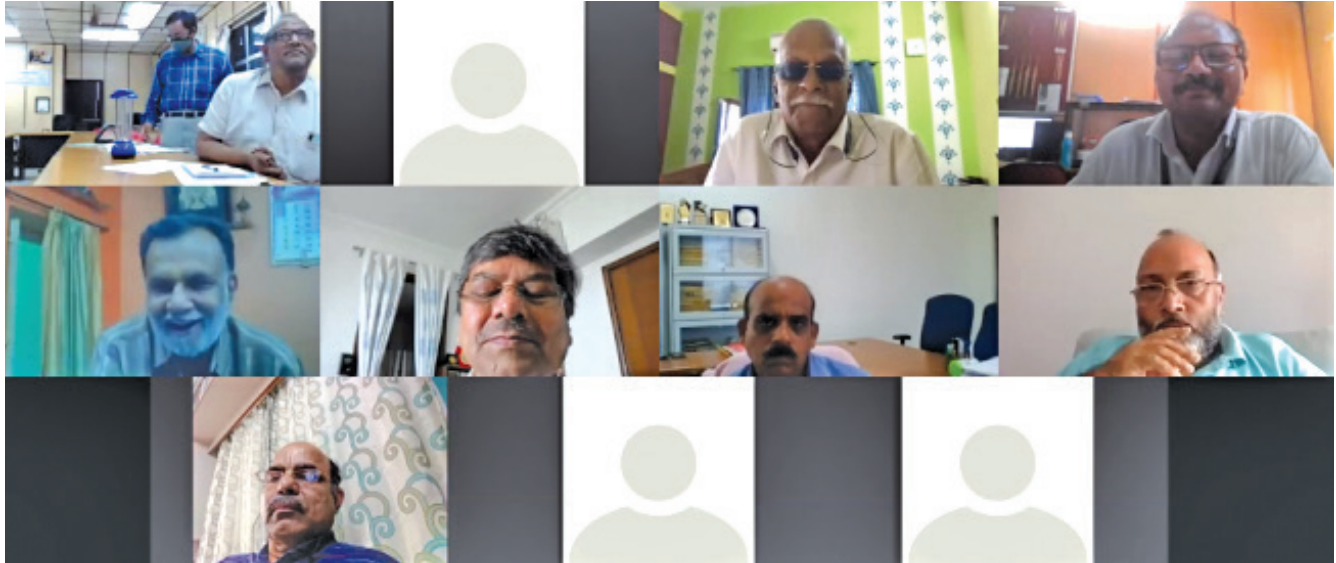
में उत्साह एवं उमंग के साथ भाग लेना चाहिए। उक्त चेतना मास के दौरान हिंदी में 4 विभिन्न प्रतियोगिताओं का आयोजन किया गया तथा विजेताओं को नकद पुरस्कार प्रदान किए गए। अंत में श्री बी सतीश, वरिष्ठ प्रशासनिक अधिकारी के द्वारा धन्यवाद ज्ञापन के बाद समारोह का समापन हुआ। इस पूरे कार्यक्रम का समन्वय तथा संचालन डॉ. एस आर वोलेटी, निदेशक, भाचाअनुसं के दिशा-निर्देश में डॉ. महेश कुमार, श्री बी सतीश तथा श्रीमती वनिता के द्वारा किया गया।

### Virtual IBSC Meeting of IIRR on September 4, 2020





**Virtual Interactive meeting for QRT and IMC on September 8, 2020**



**Virtual Independence day celebration at IRR on August 15, 2020**



**Staff News**

**Retirements**

- Shri. S. Prabhakar, Assistant retired from the Council's service on attaining the age of superannuation on 31.07.2020



- Shri. P. Vittalaiah, Technical Officer, retired from the Council's Service on attaining the age of Superannuation on 31.08.2020



- Dr. Gururaj Katti, Principal Scientist retired from the Council's service on attaining the age of Superannuation on 30.09.2020



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