भाकृअनुप
ICAR

भा.च.चा.अ.सं.
IGFRI

60th Foundation Day

1st November, 2021

Director's Report

ICAR-Indian Grassland and Fodder Research Institute

Near Pahuj Dam, Gwalior Road, Jhansi 284003, Uttar Pradesh, India

(ISO 9001-2015 Certified Institute)

On the occasion of 60th Foundation Day of ICAR-Indian Grassland and Fodder Research Institute, Jhansi, I wholeheartedly congratulate all the past and present scientists, technical, administrative and supporting staff of the institute for their sincere contributions towards the progress of the institute. The institute is recipient of prestigious 'Sardar Patel Outstanding ICAR Institution Award' and has made incredible progress in the field of forage research, extension and capacity building and has widened its visibility at national and international level. ICAR-IGFRI, the only institute in Asia undertakes research exclusively on grasslands and fodder crops, also performs development and management of grasslands. From its inception in 1962, the institute has successfully served the country for 59 years achieving several milestones in generation of various need based tailor-made technologies including 48 high yielding fodder crops varieties with an ultimate aim to serve the farming community and is now marching ahead with the achievements of multi-disciplinary research composed of soil-plant-animal continuum connecting both plant and animal research. ICAR-IGFRI is an ISO 9001: 2015 certified institute, comprises seven multi-disciplinary divisions *viz*., crop improvement, crop production, grassland and silvipasture management, farm machinery and post harvest technology, seed technology, plant animal relationship and social science, and four regional stations *viz.* Dharwad, Avikanagar, Srinagar and Palampur located at different agro-climatic zones. To address the continuous and growing challenge of green and dry fodder shortage 31 and 12%, respectively, institute has widened its approach in multi-directions with focus on meeting the demand through technological interventions and development of high yielding fodder varieties suitable for changing climate. Institute is focussing on six distinctive programmes of forage research, with multi-disciplinary and inter-divisional approach to address basic, strategic and applied research needs of the nation. I take this opportunity to share the most noteworthy achievements of the passing year in terms of research, transfer of technology and human resource development.

The major achievements are listed below:

- Applied three patents namely manual core sampler, grass seed harvester and defluffing machine
- Varieties identified for release by IGFRI: Two (Berseem (JHB 18-1 and JHB 18-2 for Hill zone, central and NWZ) Two in Berseem (JHB 17-1 and JHB 17-2) submitted for notification by CVRC
- Varieties released and notified through AICRPFC network: Six (Fodder Pearl Millet - Nutrifast - ADV 961 (ADV0061) and Harabhara (HTBH 4902); oat (OL 1874 (OL14), OL 1896, OL 1876-2) and Berseem (BL 44 (PC 91)

- First fertile tetraploid BN hybrid developed
- *Sesbania sesban* based alley cropping system for improving forage availability in rainfed semi-arid Rajasthan
- Management of *Sclerotium rolfsii* infection in berseem
- Alternate land use systems for improving soil functionality in semi-arid tropical India
- Developed new defluffing machine and an evaporative cooled hydroponic fodder production system
- Designed grass seed pelleting machine and micro-controller based model for seed treatment
- Integration of fruits and forages at farmers' fields for crop diversification
- Created facility "Naturally Ventilated Greenhouse" at farmers field for high value vegetables production
- Organized training programs on fodder production, conservation and utilization for progressive farmers, field veterinarians, and officers of various government organizations
- *Mera Gaon Mera Gaurav* programme in 80 villages and *Swachha Bharat Abhiyan*
- Adopted 35 *Gaushalas* in Rajasthan (21), Uttar Pradesh (7), Madhya Pradesh (6) and Karnataka (1) to propagate its fodder production technologies through outreach activities to make these *Gaushalas* self-sufficient in green fodder availability. Provided root slips (Napier and Guinea grass), seeds (Oat, Berseem, Cowpea, Sorghum, Maize *etc.*), Azolla and technical input to these *Gaushalas*.
- Organized virtual training for *Gaushalas* on "Fodder production, conservation and utilization.
- Supplied seeds and planting material of about Rs 75.0 Lakh to more than 15 states, dairy cooperatives, farmers and private enterpreuners.
- For the first time 'Farmers-scientist interface meeting on every Wednesday' was started in July, 2021. In total 1221 farmers benefited from the meeting where 15 expert lectures were delivered and more than 150 farmer's queries have been resolved successfully.
- MoU signed with CFU of Saurashtra Kuchch region of Gujarat of important grasslands especially Banni grassland
- State Fodder Plans were developed for 16 states and 11 have been published

In addition to above, Institute developed and finetuned various technologies for increased fodder yield from mono, mixed and intercropping patterns, integrated farming systems as well as horti-pasture and silvi-pasture models. The institute provided consultancy to various states for grassland and forest development as well as

technological backup to the gaushala for fodder self sufficiency. Institute celebrated a number of days of national and international importance which include World Forestry Day, World Environment Day, World Soil Day, World Food Day, Women Farmers Day, Yoga Day, Constitution Day and 152nd Birth Anniversary of Mahatma Gandhi and Lal Bahadur Shastri. Institute continued its efforts of human resource development, capacity building of its stakeholders through various training programs as well as technology transfer through its outreach plans and programs such as MGMG, KISAN MITrA, IFS at farmer's field, NIAFTA, FFP, SCSP, TSP *etc.*

Program 1: Plant genetic resources, breeding and biotechnology

Two berseem (JHB 18-1 and JHB 18-2 for Hill zone, central and NWZ) were identified for release. Sterility of Bajra-Napier (BxN) hybrid has been successfully overcome via modified polyploidy breeding strategies aided with *in-vitro* embryo rescue and regeneration and a fertile variant of tetraploid BxN hybrid was produced for the first time globally utilizing novel tetra bajra variant in crossing program. Biofortified lines for major mineral content in oat have been identified. Three explorations were undertaken and 147 accessions (44 from Jhansi and 103 from J & K) of cereal fodder and legumes, grasses, fodder shrubs and trees were collected. Accessions of cowpea, lablab bean, sorghum, maize, bajra, guinea grass and oat were characterized. Ten high biomass and multiple foliar disease (zonate and anthracnose) resistant forage sorghum lines; three high forage yielding fodder maize lines; eight pearl millet lines for high biomass and five superior BN hybrid lines have been identified. Inter varietal and inter specific crosses were developed in berseem, oat, bajra and maize. Heat tolerant and salinity stress tolerant lines have been identified in oat. As national active germplasm site, 16 accessions of forage varieties were maintained in the field gene bank. One thousand two hundred and twenty one accessions of oat germplasm were conserved in the long term storage and IC number was obtained for 90 forage accessions. Under MTA, 2315 accessions were received from ICAR-NBPGR for characterization, regeneration and multiplication.

Programme 2: Diversification and sustainable intensification

In round the year forage production through silvipasture system, based on carbon management index (CMI) and biological activity index (BAI), eco-restoration efficiency value was calculated, *Morus alba* and *Acacia nilotica* were the most efficient trees and *Panicum maximum* was the most efficient grass for restoration of degraded land under tropical climate of Bundelkhand region and their eco-restoration efficiency was ~10 times greater than fallow land. Thus, *Morus alba* + *Panicum maximum* and *Acacia nilotica* + *Panicum maximum* based silvipasture system are most effective system for eco-restoration of degraded lands of tropical climate. In three-tier silvipasture system, *Ziziphus mauritiana* recorded a maximum top feed (1.24 t ha^{-1}) in association with *Hardwickia binata.* In guava medium pruned trees produced

highest fruit yield from Lalit (17.3 t/ha) and Shweta (15.9 t/ha) varieties. This horti-pasture system also stored 11.9 to 15.2 t C/ha in guava trees.

Programme 3: Management of natural resources and soil health

Study on irrigation scheduling for enhanced water use efficiency of BN hybrid+cowpea and TSH+ guar indicated that the water use efficiencies of BN hybrid+cowpea and TSH+Guar were 22.4 and 20.6 kg dm/ha-mm respectively. The crop coefficient (Kc) was estimated to be 1.22 and 1.18 for BN hybrid+cowpea and TSH+Guar, respectively. Artificial neural network (ANN) demonstrate capability to predict reference evapo-transpiration with high accuracy (R^2 =0.97) and even in limited data scenario (Tmax, Tmin & amp; Rn), ANN could be effective tool (R^2=0.89) to estimate the reference evapo-transpiration.

Program 4: Forage seed research and its production

The seed standards for five forage crops *viz*. red clover, brome grass, orchard grass, tall fescue and rye grass is very close to be developed. Studies on stale seed bed technique for weed management in berseem seed production fields, techniques for detopping, micro nutrient, weed and better moisture management resulted 50% reduction in moisture but comparable seed yield in *rabi* fodder maize seed production under central India conditions. In order to facilitate easy transportation of propagation material of high yielding varieties, single bud propagation technique has been standardized which are currently under field evaluation, once commercialized it will ease the transportation and faster spread of the superior varieties of BN hybrid. Soaking of BN hybrid cuttings in IBA @ 200 ppm for 15-20 minutes resulted >80% rooting and establishment even after storage for cuttings for 15-18 days. Other studies in the period are extraction, identification and use of smoke derived compounds from tropical grasses burning, development of herbicide tolerant berseem genotypes for economical weed management in seed production fields, role of seed microflora, seed coat biochemical and physiological properties, seed stimulants for seed enhancement. More than 350 q of breeder seeds of 25 high yielding varieties in 10 fodder crops and truthfully labeled seeds of about 800 q of different varieties fodder crops and grasses has been produced. Institute has produced and supplied >25 lakh root slips of improved varieties of BN hybrids to farmers, state governments, state dairy cooperatives, NGOs and private entrepreneurs. To strengthen the seed production, processing and storage facilities financial assistance of Rs. 355 Lakh from DAC, Ministry of Agriculture & Farmers Welfare and Rs 246 Lakhs under National Livestock Mission from Ministry of Animal Husbandry dairying and Fisheries and work is under progress and about to finalize. During the year 2020-21 institute supplied seeds and planting material of about Rs 75.0 Lakhs to more 15 state governments, dairy cooperatives, farmers and private entrepreneurs.

Program 5: Post-harvest management, forage livestock production system and and farm mechanization

Ensiling of sugarcane tops indicated that it could be conserved as silage with or without additives. The ensiled sugarcane top has lactic acid content 1.75-3.85% and pH 4.0-4.80. The DM intake of sugarcane top silage was lower (11%) as compare to sorghum silage (570 *vs* 510 g/d) coupled with lower digestibility of nutrients. Silage prepared from ensiling of *Sehima nervosum* genotypes IG99-198, IG2045-1, IG02-713, IG99-191 and IG02-703 on their post monsoon growth had DM and pH values between 4.57-4.84 which indicates good ensiling potential of these genotypes. Seven isolates of Lactic acid were isolated from Sehima genotypes. Feeding value of sugarcane grass silage, eighty two lines of sugarcane germplasm were evaluated for fiber contents (NDF, ADF, Cellulose etc.) Feeding trial on Bhadawari calves of for sugarcane grass silage indicated comparable results with sorghum silage. Study on summer stress in goats indicated that during hot-humid summer season, supplementation of barley grain (200 g/h/d) and $NaHCO_3$ (10 g/h/d/ in female Bundelkhandi goats resulted improvement in energy (44.8 *vs.* 60.3) and protein (8.10 *vs.* 10.05) consumptions with positive impact on body weight gain and reduction of heat stress (when THI was more than 72). Work on nutrient intakes from natural pastures revealed that high stocking rate/ grazing pressure on pastures has indicated lower nutritional status in sheep. The use of economic diet, in which mustard oil cake nitrogen of concentrate mixture was replaced with berseem hay meal at 60% levels and simultaneous incorporation of 0.75%NPN, the feed cost per kg milk production was Rs 3.51 or 16.25% cheaper in Bhadawari milch buffaloes. Production performances in Bundelkhandi goats indicated that average body weights of Bundelkhandi goats at birth, 3 month, 6 month, 9 month and 12 month were 2.22 ± 0.04, 9.55 ± 0.13, 12.48 ± 0.29, 17.16 ± .30 and 20.19 ± 0.35 kg, respectively. Average daily milk yield was 0.551 ± 0.04 kg, while average milk yield at 90 days was 42.74 ±2.37 litres with lactation length of 102.6±5.05 days. Performance study of Bhadawari buffalo during the year 2020-21 revealed that lactation milk yield and standard lactation milk was 17334 and 1558 kg, respectively. Average conception rate was 55.5%. Average milk fat, SNF, protein and lactose were recorded as 8.31, 9.73, 3.5 and 5.29 per cent, respectively. For in-situ conservation of Bhadawari buffaloes, 1400 AI were performed in the breeding tract during the year 2020-21. More than 500 calvings were also recorded in the field from the AI's done during the year 2019-20.

A defluffing machine was developed with an efficiency of 80-92 per cent depending upon the type of grass seed and of the cost Rs. 54,000 along with the process methodology for the separation of true seeds from fluffy grass seeds. Two patents of newly developed Grass Seed Harvester and Defluffing Machine have been filed. Evaporative Cooled Hydroponic Fodder Production

System has been designed and developed for resource deficit farmers and hot-dry semi-arid climate conditions. Seed rate of 300 g/ft^2 and soaking period of 12 hours were found as optimum values which can be a recommended package under hydroponic maize fodder production since it has potential of 7.5 kg biomass green fodder production/kg maize seed. A facility "Naturally ventilated greenhouse" has been created at farmers field (Kadesera Kala, Dist.- Lalitpur) for high value vegetable production. Designs of semi automatic grass seed pelleting machine and solar powered self-propelled multipurpose machine for agricultural operations were developed using CAD software. A micro-controller based model for chemical treatment of different fodder seeds was designed and fabricated, in which the control system consisted of ardinouno R3, servo motor, liquid cutoff sensor and flow sensor. A Total Mixed Ration (TMR) for commercial goat production designed after adding supplements to roughage ration.

Program 6: Social, economic, policy and translational research

Under National Initiative for Accelerating Fodder Technology Adoption (NIAFTA) programme, fodder resource development plans for 16 states have been developed and 11 have been published. Economics of developing common pasture lands indicated, discounted B:C ratio of 2.52, NPW of Rs. 36.16 lakhs and payback period of 05 years. Fodder technologies dissemination through KISAN MITRA Project, Farmer First programme, MGMG, SCSP, NEH & TSP which resulted in increase in income of farmers up to 15-25%. As part of SCSP, ICAR-IGFRI in collaboration with KVKs of six states (UP, West Bengal, Punjab, HP, J&K, Karnataka), 34 trainings were organized for 1007 farmers. Fodder technologies related demonstrations (1072) were conducted in an area of 56.1 ha. Animal technologies related demonstrations on (668 animals) of 341 farmers were conducted. Assessment of livestock based integrated farming systems at farmers field, indicated that model-I (3 ha) has provided net returns (NR) of Rs. 7.3 lacs with the investment of Rs. 10.7 lacs., enhanced fodder production to 132 t, showed 22% reduction in fodder deficit over the last year.

Similarly, model II, II and IV recorded Rs. 11.2, 0.93, 14.4 lacs NR respectively. The improvement in fodder production was 47, 28, 45 and 32% for Model I, II, III and IV, respectively. Under KISAN MITrA, adoption of fodder and grasses increased cow milk yield by around 58% and buffalo milk yield by around 27%. Technical efficiency (TE) for treated group ranges from 0.68 to 0.72 and that of for control ranges from 0.52 to 0.65, depending on how biases are controlled. The TSP Plan has been implemented in Dausa (Rajasthan), Nandurbar (Maharastra), Chamba District (HP), Shopian district (Srinagar) and KVK, Badwani (MP). During the *Rabi*, 2020-21, 172 demo of oat, 165 demo of mustard in Dausa, Rajasthan; 117 demo of tall fescue and 200 demo of mineral mixture in Badgam and Waliwar district of Unioin Territory of Jammu and Kasmir; 100 demo on perennial fodder sorghum; Outcome of the various technological and support interventions are assessed to increase in fodder production (20-25%), increase in milk productivity (15-20%).

Grasslands development

ICAR-IGFRI and State forest department, Uttar Pradesh jointly undertaken activities for grassland development in Jalaun, Hamirpur, Banda and Chitrakoot in monsoon season under NABARD financed Ecosystem services based adaptation to climate change in Bundelkhand region of Uttar Pradesh (NAFCC). Under this program, farmers gosthi and field days were organized on various aspects of grassland development and fodder production at different districts of Bundelkhand.

Agricultural Technology Information Centre (ATIC)

ATIC hosted 117 visits where, 1270 fodder stakeholders (dairy farmers, agripreneurs, agri-students, women krishi-pashu sakhi *etc.*). Advisory services through ATIC include visits (117 groups), telephone advisory (354), email (844) and postal letters (2). Along with advisory services, retail sale from ATIC was Rs. 6739 vermicompost and publications. Text messaging through MKisan portal- (50500), YouTube videos (18), Twitter posts (200), online workshops (3), and other e-services were provided from ATIC. A total of 61 extension activities including scientists farmers interface meetings, farmer trainings, field days and Kisan Gosthis were conducted. Total number of 5

leaflets, 12 popular articles, 3 newsletters and 10 success stories were compiled for technology extension purpose.

Human Resources Development

M.Sc. Dissertations-21; Participation of Institute's personnel in Off Campus Specialized Courses: 32, Sponsored Training Programmes: 4 Nos., Kisan Mitra Project Farmers Training in 3 batches, Institutional Staff Capacity Building programmes: 02, Participants-126; Sponsored Skill Development Trainings at Institute: 02, Participants-50.

IGFRI in ICAR Sports

On the occasion of National Sports Day, RLBCAU, ICARI-IGFRI and ICAR-CAFRI, Jhansi jointly organized four-day sports event from 26th to 29th August, 2021 to commemorate the birth anniversary of hockey legend Major Dhyan Chand. More than 150 participants took part in various sports events.

Awards and recognition

Dr. RV Kumar - Dr. KG Tejwani Award for Excellence in Agroforestry Research and Development; Dr Sanjay Kumar Singh - Scientist of the Year Award – 2020 by the Society for Upliftment of Rural Economy; Dr Sanjay Kumar Singh - Best Scientist Award, 2020 by the Society for Green World for Sustainable Environment,; Dr. Gaurendra Gupta - Young Scientist Award-2021 from Vigyan Varta; Dr. Mahendra Prasad - Young Scientist Award 2020 by Society for Biotic and Environmental Research, Khowai, Tripura; Dr. Hanamant M. Halli - Young Scientist Award by Society for Agriculture & Allied Research (SAAR); Etah, Uttar Pradesh, Dr. S.S. Bhat - Scientist of the Year Award from 'Ek Nayi Rah' Foundation, Etawah, Uttar Pradesh; Dr Suheel Ahmad - Eminent Scientist Award by Society for Agriculture & Allied Research, Etah,

Uttar Pradesh; Sanjay Kumar Singh -Fellow of The Institution of Engineers (India), 2020.

Mera Gaon Mera Gaurav

The institute has adopted 95 villages in Karnataka, UP, MP, Rajasthan, HP and J & K states. Scientists provided information on fodder crops and livestock management practices and conducted demonstrations in adopted villages. Despite of covid difficulties, demonstrations (160), field visits (28) interface meetings (13), gosthis/trainings involving 255 farmers were conducted. Awareness created among 350 farmers on importance of soil health management, newly released fodder varieties, crop diversifications, participatory seed production, improved livestock management and balanced feeding, vaccination and deworming of the animals, dung management, biogas and vermi-compost etc. In order to broaden the coverage of institute's technologies, around 80 new villages were adopted by the 19 MGMG teams during *Kharif*, 2021. The scientists from these new teams have completed around 35 visits in *kharif*, 2021 and distributed the necessary inputs (total of 1.5 q sorghum seed, 30000 (no.) BN rooted slips) to demonstrate the improved package of production technology through maintaining around 50 demonstrations of sorghum fodder and around 140 demonstrations of BN Hybrid.

MoUs signed

Following MoUs have been signed by the Institute with various stakeholders:

1.	MoU- ICAR-IGFRI and ITM University, Gwalior (2021)
2.	MoU-ICAR-IGFRI and Chandra Shehkar Azad University of Agriculture and Technology, Kanpur (2021)
3.	MoU-ICAR-IGFRI and Sri Sri Rural Development Program Trust, Art of Living International Center, Udaypura, Bangalore, Karnataka (2021)
4.	MoU-ICAR-IGFRI and ICAR-National Research Centre on Mithun, Nagaland (2021)
5.	MoU-ICAR-IGFRI and Central Agricultural University, Imphal, Manipur (2021)
6.	MoU- ICAR-IGFRI and ITM University Gwalior (2021)
7.	MoU-ICAR-IGFRI and Dharmachakra Trust & Kamadugha Trust No. 2/A, J.P. Road, 3rd Phase, Girinagara, Bangalore
8.	MoU-ICAR-IGFRI and CSK Himachal Pradesh Krishi Vishvavidyalaya, Palampur (H. P.)

Important events

- Two national Group Meetings, Kharif-2021 on 1st-2nd June, 2021 and Rabi 2021-22 on 20th September, 2021 conducted through online platform.
- Training program for Gaushalas on Fodder Production, Utilization and Conservation was jointly organised by ICAR-IGFRI, Jhansi and Bihar Agriculture University, Sabour, (Bihar) on 27 and 28 July, 2021 in vitual mode. In training more than 100 farmers/ gaushala representatives from Bihar (94), Jharkhand (3) MP(2) and Chhattisgarh (2) have participated.
- ICAR-IGFRI, Jhansi, has organized the two days virtual training programme on fodder production, utilization and conservation for the Gaushalas of MP and Chhattisgarh from 27-28th Sept. 2021.
- World Soil Day was celebrated on 5th December, 2020 and 58 soil health cards were distributed to farmers.
- Sixteenth Parthenium Awareness Week was organized in the institute during 16-21 August, 2021 with emphasis on eradicating Parthenium in crop fields and vacant areas.
- A Field Day on Cactus was organized on 5th Dec. 2020 at ICAR-IGFRI, Jhansi to promote spineless cactus as alternate fodder resource during dry summer months of Bundelkhand region.
- Technology and Machinery Demonstration meet was organized at on 12th March, 2021.
- At RRS Avikanagar, 25 farmers attended training programme under ATMA for Livestock Farmers on "Scientific Technical Training for Improved Animal Husbandry" organized by Veterinary University Training & Research Centre, Tonk (Rajasthan University of Veterinary & Animal Sciences, Bikaner).

- RRS Srinagar organized 02 Awareness cum Training Programmes on Fodder Production, Utilization and Conservation at Laam, Tral and Zamboor-Pattan villages.
- Twenty starts-up (entrepreneurs) visited RRS Avikanagar and attended training programme on "National Skill Development Training Programme; Scientific Sheep, Goat and Rabbit Rearing" organized by CSWRI, Avikanagar.

- An online Workshop on Fodder Resource Development Plan for Bihar on March 06, 2021 was organized in which 45 officers from Bihar participated.
- A training programme for 40 farmers from ATMA, Shivpuri (MP) was organised at IGFRI, Jhansi from 8-12 March 2021.

COVID-19 Protection measures

ICAR-IGFRI considered COVID-19 as a serious contagious disease during both the waves of pandemic. The institute has meticulously followed all the protocols instructed by Ministry of Health and Family Welfare, GOI on day to day basis. All possible preventive measures were adopted such as physical distancing, regular washing of hands with sanitizers (automatic dispenser installed at the institute), regular wearing of face masks, regular checking of body temperature, sanitization of institute premises and strictly avoided mass gathering and meetings in the institute. The institute also arranged a COVID-19 check-up camp for institute employees.

Research projects approved during 2020-21

Project Title	Funding Agency
Developing cheaper Nutrigel for improving water and nutrient use efficiency in degraded lands of Bundelkhand	DST-SYST
Breeding dual purpose barley varieties for fodder and grains	UPCAR
Development and Evaluation of Annual Moringa for Food, Fodder and Nutritional Security of Farming Communities of Uttar Pradesh	UPCAR
Use of fly ash in agriculture for sustainable crop production and environmental protection	NTPC
Bioprospecting of abiotics stress tolerance genes in grasses	DST-SERB
Assistance for fodder seed production	NLM
Germplasm/breeding support and production systems: Forages under alliance Bioversity-CIAT-ICAR work plan project: "Use and conservation of agro-biodiversity for food and nutrition security, increased agricultural sustainability and resilience to climate change in India	CIAT

Publications

Research papers: 62, Presentations/Papers/Abstracts: 68, Technical bulletin/Training and Instructional manual/Compendium/Souvenirs'/Lectures: 22, Popular articles: 36, Folders / Extension leaflets: 18.

Appointments

Dr. Amaresh Chandra - Director, ICAR-IGFRI, Jhansi on 28th April 2021

Joining

Scientist (01) : Dr. Sudesh Radotra – Principal Scientist (LPM) on 18th October, 2021

Skilled Support Staff (30) : Shri Hari Ram, Shri Keshav, Shri Chhote Raja, Shri Shripat, Shri Panchu, Shri Karan, Shri Gulab Singh, Shri Ningappa Bailur, Shri Maruthi Belamaddi, Shri Rudrappa Nagneur, Shri Shiyojiram, Shri Ratiram, Shri Asha Ram, Shri Om Prakash, Shri Santosh, Shri Kapil Lal, Shri Dhani Ram, Shri Moti Lal, Shri Madan, Shri Kashi Ram, Smt. Khumano, Shri Ganpat, Shri Prabhu, Shri Ram Sahay, Smt. Ramvati, Shri Man Singh, Shri Hanuman, Shri Brijraj, Shri Basappa Talwar and Shri Khuman.

Promotions

Departmental promotion/Probation Clearance/Regularization

Scientists (03):

Dr. Mahendra Prasad, Scientist (Soil Science), Dr. Vikas Kumar, Scientist (Agricultural Economics), Dr. Kumar Durgesh, Scientist (G&PB)

Technicals (04):

Dr. Ratnkar Singh Patel, Dr. V.K. Gupta, Sh. S.V. Shinde and Sh. Virendra Pal Singh

Administrative (03):

Shri Kripa Ram, Shri Jagdish Prasad and Smt. Kumud Khera

Probation period completed (07):

Shri Sonu Kumar Mahawer (Agril. Chemical), Shri Bholuram Gurjar (FMP), Ms. Bhargavi H.A., (Genetics & Plant Breeding), Shri Keerthi M.C., (Agril. Entomology), Dr. Ravi Prakash Saini (Agril. Biotechnology), Dr. Subhash Chand (Genetics & Plant Breeding), Shri Avijit Ghosh (Soil Science).

Transfers (from Institute) (03):

Dr. S.N. Rokde, Pr. Scientist- 21.1.2021 to ICAR-CICR, Nagpur

Dr. S.K. Mahanta, Pr. Scientist- 07.4..2021 to IARI, Jharkhand

Dr. U.R. Sangle, Pr. Scientist- 26.6.2021 to ICAR-CCRI, Nagpur

Retirements

Technical Staff (5):

Shri Pratap Singh Yadav, Shri Krishna Behari Sehgal, Shri Iqbal Ahmad, Shri Manoj Kumar Sharma and Shri Ramesh.

Administrative Staff (3):

Shri Shriansh Kumar Dwivedi, Shri Anil Kumar Chaturvedi and Shri Rajendra Kumar

Skilled Support Staff (12):

Shri Kallu, Shri Punnu, Shri Amar Singh, Shri Atma Ram, Shri Hanumat Singh, Smt. Ram Rati, Shri Manohar, Shri Pragi, Shri Bhagwan Singh, Shri Gopi, Shri Ayodhya Prasad and Shri Hari Ram.

हर कदम, हर डगर
किसानों का हमसफर
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Published by the Director, ICAR-Indian Grassland and Fodder Research Institute, Jhansi-284003
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website-http://www.icar.gov.in

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Photographs:
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