REPORT

of

One day workshop on

Climate Smart Wheat Production for Food Security

January 14, 2021

Organized by

Department of Agronomy

MNS-UNIVERSITY OF AGRICULTURE, MULTAN

2021

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Executive Summary

World population is expected to reach 9 billion by 2050, and Pakistan is ranked as world's 6th most populous country. Climate change is already a reality and its negative effects are already being observed across the globe. Food production systems are most vulnerable to climate change and it is a serious threat to food security especially in developing countries. Food security is of central importance to national security. Wheat is our cereal staple food and its low national yield is a serious issue to be addressed. Uncertainty of climatic optima, delayed sowing, edaphic conflict of traditional rice-wheat cropping system, non-availability of quality seed, imbalanced use of fertilizers, shrinking irrigation and land resources and weed infestation are the major constraints limiting wheat productivity in Pakistan. These situations are specifically damaging for small land holding farming communities. Therefore, it is the time to explore recent technologies and approaches towards sustainability. To meet the projected food demand, there is need to explore cutting-edge technologies to break the existing yield barriers and make wheat cultivation more remunerative.

Department of Agronomy, MNSUAM in alignment with University's mission to serve the farming community of the region is keen to impart training to the farmers to cater needs of agriculture sector through standardization of production practices for food, fiber and fodder crops. Department is also envisioned to develop effective, environment-friendly and economically viable crop production strategies for climate smart agriculture. The objectives of the proposed workshop were to showcase the significance of climate smart stewardship for wheat production and assess the associated challenges and their pragmatic solutions. This workshop provided an opportunity to review the existing initiatives, knowledge exchange, climate smart wheat production practices, capacity building, new research avenues, and learning from the experiences of professionals and wheat farmers. The event covered informative presentations/lectures by subject experts followed by interactive discussion, Q&A session, and field demonstrations focusing on production scenarios, latest breeding strategies for new and improved wheat germplasm, wheat pathology, physiology and quality in an era of dwindling natural resource base and uncertainty of climatic optima. About 150 participants were trained about innovative trends and practices with special reference to sustainable wheat production in a changing climate. Specialists in wheat breeding, agronomy, pathology, physiology, entomology and quality shared their experiences with the participants, who also received hands-on training about these aspects. The contemporary issues related to wheat in Pakistan were also discussed. Invited speakers highlighted both technical and social aspects of wheat based farming systems for sustainable production to ensure food security. The participation of progressive farmers further enriched the discussion by sharing their practical field knowledge. It will lead to development of new action plans encompassing holistic approaches to devise eco-efficient wheat based cropping systems in the country.

Workshop Venue

The workshop was held at MNS University of Agriculture, Multan (MNSUAM). The MNSUAM was established in 2012 and has been recognized by Higher Education Commission, Pakistan. Since then, it has emerged as a fast-growing chartered public sector University that is aspiring to mark its name among the best agriculture universities in the country. The University distinctly aims to "provide systems and leadership in professional learning, research and outreach to promote agricultural production, nutrition, entrepreneurship and community service" to meet its mission of "food security and knowledge economy through intellectual and social transformation".

Objectives

- To promote education, training and capacity building for sustainable production of wheat with emphasis on food security.
- To facilitate opportunities for networking, collaboration and research on the subject.
- To explore recent technologies and approaches to develop climate smart wheat-based farming systems in the country.

Program

Time	Activity/Presentation	Resource Person
9:30 am	Reception and Seating of Guests	-
10:00 am	Qiraat and Naat	-
10:10 am	Opening Remarks	**Prof. Dr. Asif Ali** Vice Chancellor, MNSUAM
10:35 am	Farmer Weed Related Apprehension in Cotton-wheat Cropping System and the Way Out	**Dr. Nazim Hussain Labar** BZU, Multan
10:20 am	Comparison of Sowing Methods for Saving Water and Improving Productivity of Wheat	**Dr. Hafiz Muhammad Nasrullah** ARS, Khanewal
10:50 am	Plant Nutrition Management in Wheat Under 4-R Nutrient Stewardship Technique	**Mr. Imran Hameed** Fatima Group
11:05 am	Quantification of Integrated Climate Change Impact Assessment for Cotton-Wheat Cropping Systems in Southern Punjab, Pakistan	**Dr. Shakeel Ahmad** BZU, Multan
11:20 am	Integrated Management of Wheat Rust	**Dr. Arshad Baloch** RARI, Bahawalpur
11:35 pm	Hybrid Wheat for Food Security	**Prof. Dr. Zulfiqar Ali** IPB^2, MNSUAM
11:50 pm	Wheat Production Under Changing Climate: Success Stories of MNSUAM	**Dr. Abdul Ghaffar** Department of Agronomy, MNSUAM
12:05 pm	Post-harvest Losses and Management in Wheat	**Dr. Mirza Abdul Qayyum** IPP, MNSUAM
12:20 pm	Question Answer Session	Expert Panel
12:45 pm	Remarks by the Chief Guest	**Mr. Saqib Ali Ateel** Secretary Agric., South Punjab
12:55 pm	Vote of Thanks	**Prof. Dr. Shafqat**

		Saeed Dean, FAES, MNSUAM
1:00 pm	Field Visit/Demonstrations	**Mr. Mahmood Alam** Farm Manger, MNSUAM
2:30 pm	Refreshment	-

Workshop inauguration

The organizers warmly welcomed all participant of the workshop and decorum of the conference hall was managed by proper seating arrangements following COVID-19 SoPs for respected participants, guest of honor, chief guest, farmers, faculty members, participants from south Punjab agriculture forum, agriculture interns and students. The proper proceedings of the conference were started with the recitation of few verses from the Holy Quran and Naat e Rasool Maqbool (PBUH). Dr. Muqarrab Ali, Assistant Professor, Department of Agronomy served as the Stage Secretary for this training workshop.

Welcome Address by the Vice Chancellor, Prof. Dr. Asif Ali

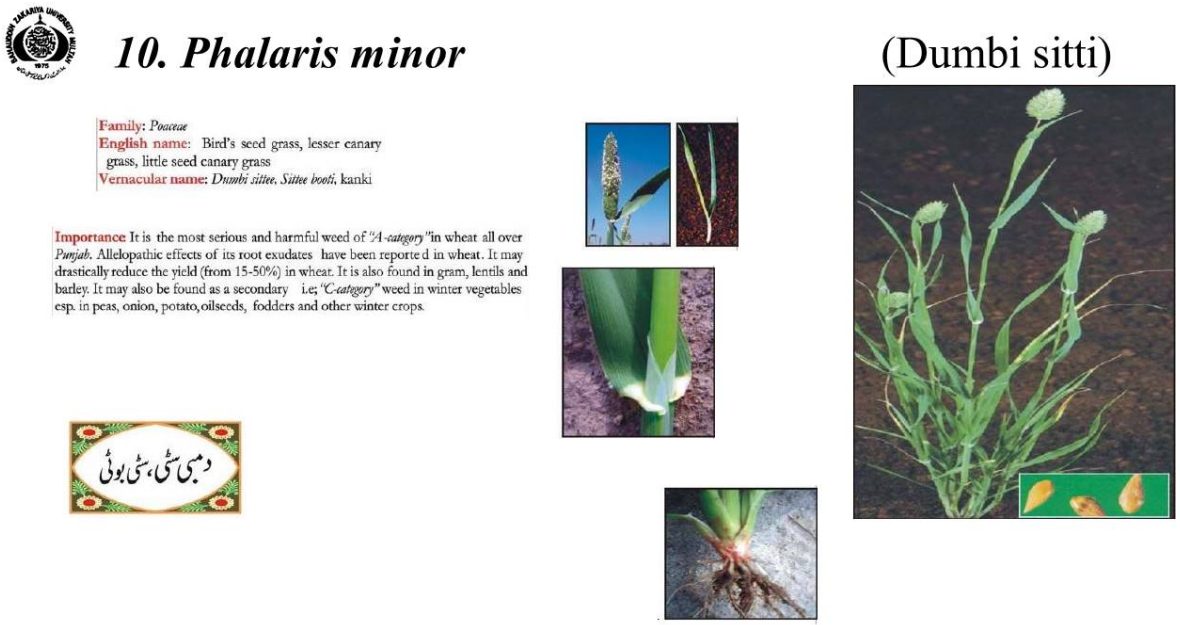
The Vice Chancellor welcomed the chief guests, Mr. Bakarullah (Additional Secretary, Agriculture South Punjab), invited speakers, national scientists, researchers, industrial partners, farmers, stakeholders, students and campus community. Professor Dr. Asif Ali appreciated the Agronomy Department for arranging such an important and timely event management related to staple crop wheat under climate change scenario. He thanked farmers in particular for getting out the time from their busy schedule to attend this workshop. He said that climate smart era started in 1960 with advent of green revolution, which became possible by introduction of dwarf, fertilizer responsive and lodging tolerant wheat varieties. He added that scientists of MNSUAM are working hard to introduce hybrids of wheat having yield potential up to 10 t ha^{-1} which will be available for general cultivation in next two to three years. Innovative genetics along with proper crop management can increase notational average yield of crop under climate change scenario i.e., rust attack due to changing rainfall patterns, erratic drought spells in rainfed areas and increasing salinization of soils due to continuous use of brackish underground water. He added that farmers should judicious use herbicides and fertilizers since their excess use is degrading our soils and air quality. Prof. Dr. Asif Ali also said that university has conducted experiments to reduce seed rate up to half and got success. He further added that proper machinery will be needed to scale up this technique and efforts are underway. Prof. Dr. Asif Ali added that we are highly thankful to Punjab Government for assuring farmers a good support price. He ended his welcome talk with phrases that we are always available for the welfare of farmers and also people of this great nation.

Technical session

Speaker 1: **Prof. Dr. Nazim Hussain Labar** (**Department of Agronomy, BZU)**

Topic: **Farmer's Weed Related Apprehensions in the Cotton-Wheat Cropping System and the Way Out**

Dr. Nazim Hussain highlighted the farmer's weed related apprehensions in the cotton-wheat cropping system and the way out. Talking on the occasion, he said that weeds are the plants with specific features helping them to infest and invade in the crops and to succeed under a wide range of agro-climatic conditions. Weeds act differently in different habitats and provide shelter to the insects and diseases causing pests, resultantly lowering the quality of produce. He talked about weed problems in this particular rotation with emphasis on difficult to control weeds. He discussed the 10 most troublesome weeds of wheat and cotton. He added that weeds are serious concern to the productivity and profitability of this system and tremendous scope exists to abridge existing yield gap owing to weed infestation. Productivity and sustainability of this production system relies on the success of weed management practices and farmer's awareness is the key for long term success of weed management program. Dr. Labar said, for control of weeds, preventive measures are better in order to safe environment from herbicides for example, use of weed free wheat seed, cleaning of water channels and planting/harvesting equipment etc. Threshing place should be rotated every year. Use of well decomposed farmyard manure, because seeds of weeds remain viable even passed through digestive track of animals. For control of broadleaf weeds, herbicides should be applied after first irrigation. For control of grassy weeds, spray should be done after 2nd irrigation. Increasing number of crop plants per unit area by manipulating row spacing and seeding density may also suppress weed plants. Chemical spray should be done according instructions provided on label and keeping in view the weather forecast.

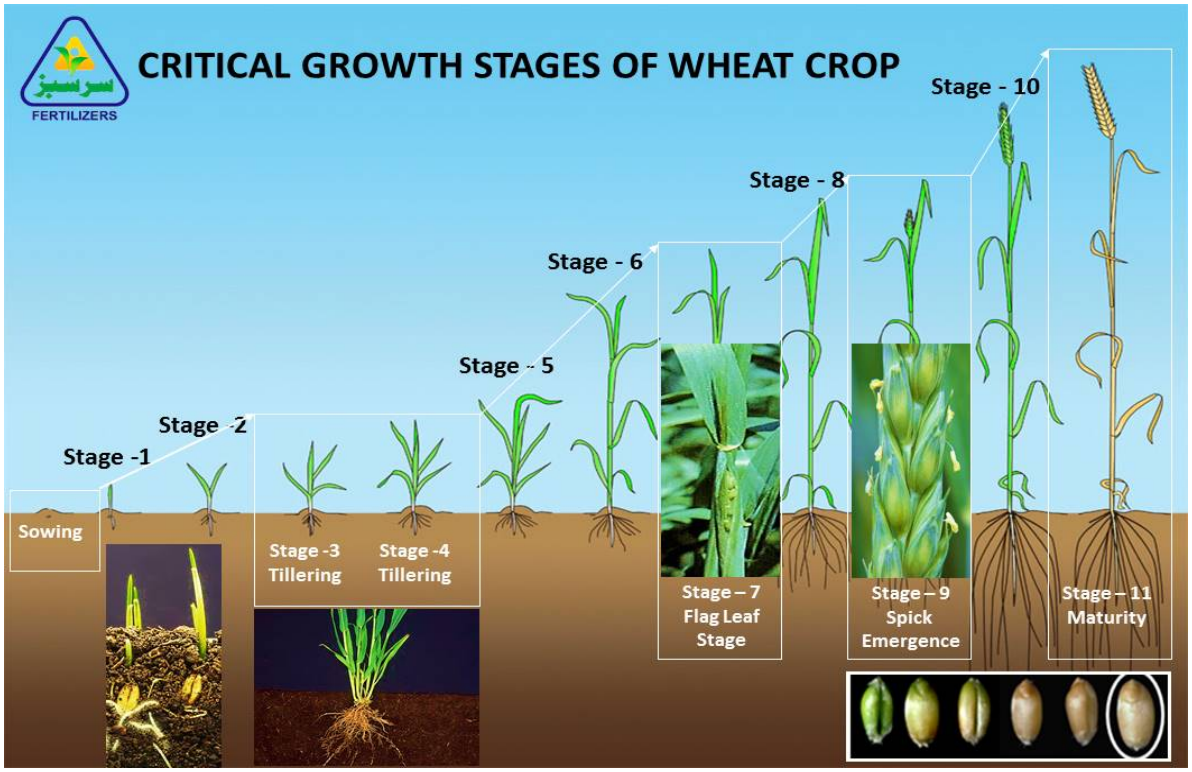


Speaker 2: **Mr. Imran Hameed (Fatima Group)**

Topic: **Plant Nutrition Management in Wheat Under 4-R Nutrient Stewardship Technique**

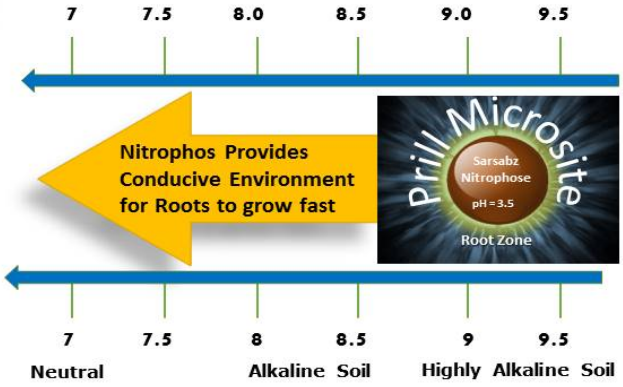
Mr. Imran Hameed from Fatima Group discussed about nutrition management in wheat crop. He briefed the participants about wheat yield gap and nutrientional status of soils in Pakistan. He briefed farmers about 4-R concept. He postulated that 4-R nutrient stewardship can provide a framework to achieve cropping system goals of increased production, profitability environmental protection and sustainability. He advocated that fertilizer should be applied at right time, at place according to recommended dose using right source according to soil properties (pH, texture, status of available nutrients). The DAP should be applied as basal,

urea should be applied in splits, i.e. half dose at the time of sowing and remaining half with 2nd irrigation. He said that nitrophos is better than diammonium phosphate and calcium ammonium nitrate is better than urea. He also concluded that fertilizer supplementation should be done before 80 days after sowing. Wheat nutrient and water requirements at various stages of development were also discussed. For right placement of fertilizers and other inputs, mechanized precision farming operations are required, he further added.



Why Nitrophos is Better Than DAP?

Acidic pH (pH-3.5)



Sarsabz Nitrophos having pH 3.5 provides conducive environment to roots to absorb more Phosphorus and micronutrients as well..... (like Zinc and Boron)

Why Calcium Ammonium Nitrate is better than Urea?

Speaker 3: **Dr. Hafiz Muhammad Nasrullah (Agronomist, Agronomic Research Station, Khanewal)**

Topic: **Comparison of Sowing Methods for Saving Water and Improving Productivity of Wheat**

Dr. Hafiz Muhammad Nasrullah said that in Pakistan about 7.8 m ha of total area under wheat cultivation is sown by broadcast method that is irrigated by flood irrigation methods having only 30-50% efficiency. Water is becoming scarce day by day, we have to adopt such sowing techniques that can save water. He highlighted the significance of different sowing methods which can be adopted to save water. He informed the house about the significance of ridge plantation of wheat for water saving in agriculture. He further added that there is 35-40% water saving with 5-15% yield increase with ridge method of sowing. Lodging is also decreased up to 80-90%. In broadcast sowing method, 0.95 cubic feet water is required to produce one kg of wheat grain; while, in ridge planting 0.37 cubic feet water requires to produce same amount of wheat grain. He concluded that 33% more grain yield can be obtained through ridge and bed planting while water can be saved to the tune of 43% in case of ridge sowing and 24% for bed sowing compared with broadcast method. The critical aspects in this regard are the laser land leveling of field and careful application of first irrigation up to half depth of the furrow. In response to a question regarding harvesting issue of wheat sown by augmented furrow method, Dr. Nasrullah replied that wheat crop sown on ridges can be harvested by tractor mounted reaper or combined harvester by keeping one or both ends of field flat. He illustrated this concept visually as well.

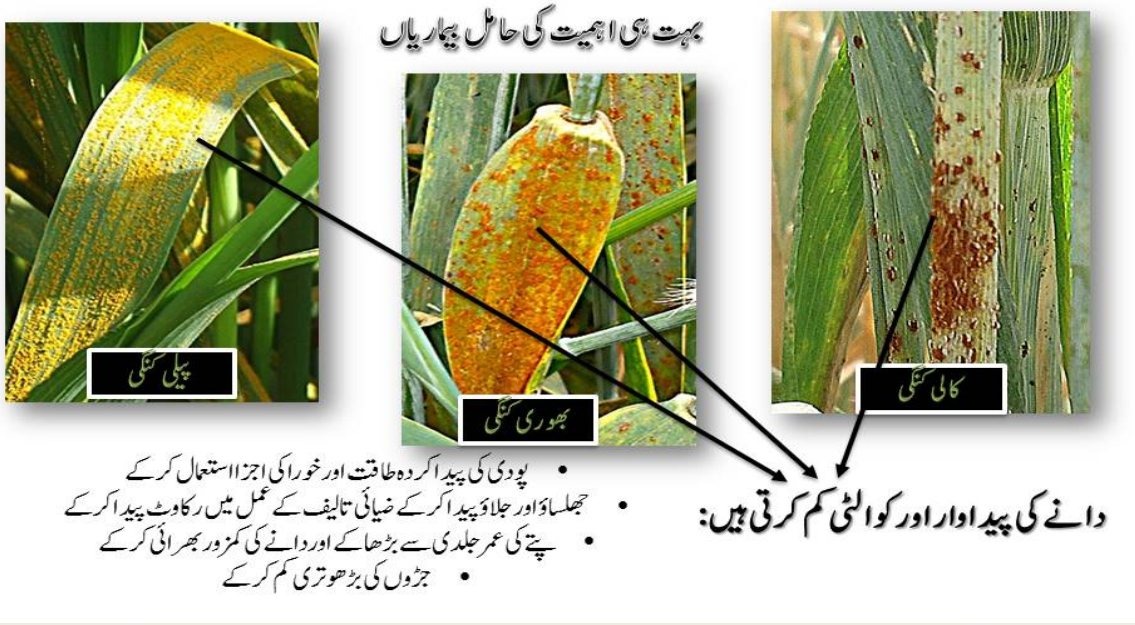
RIDGE PLANTING OF WHEAT

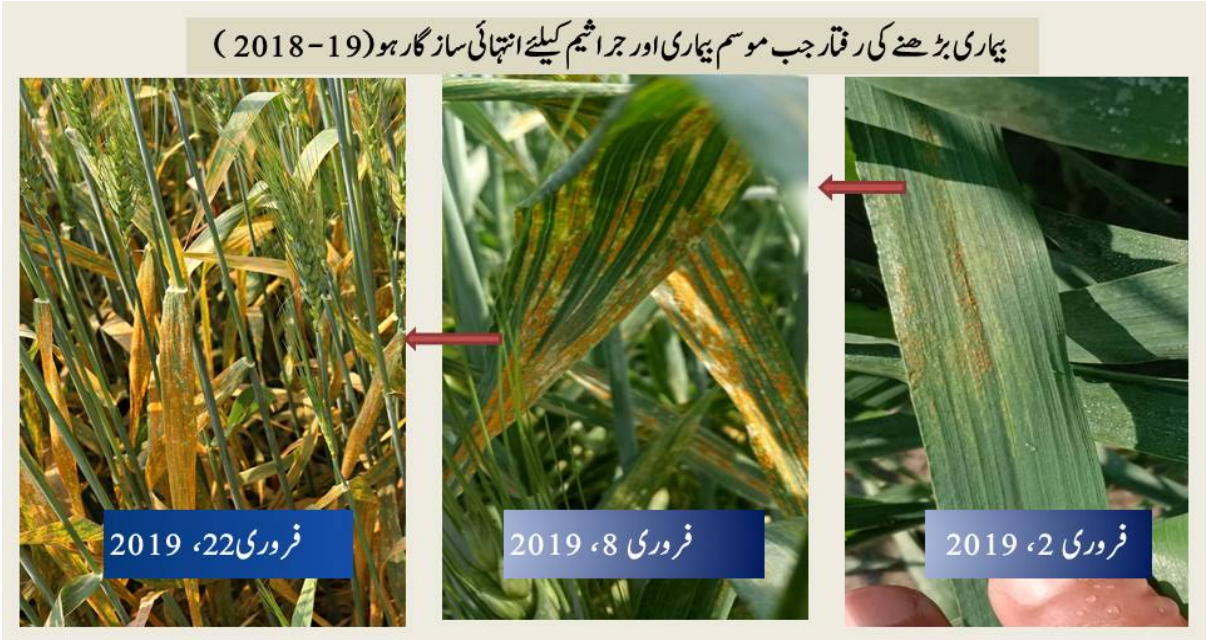
MECHANICAL HARVESTING OF WHEAT BY REAPER AND COMBINE HARVESTER

Speaker 4: **Dr. Muhammad Arshad (Regional Agricultural Research Institute, Bahawalpur)**

Topic: **Integrated Management of Wheat Rust**

Dr. Muhammad Arshad talked about climate change and its effect on disease prevalence and associated losses in wheat crop in Pakistan. He also discussed about rust attack and its integrated management in wheat crop under changing climatic patterns. Dr. Arshad said late sown wheat is more prone to rust attack, he added that rust is fast spreading disease and it is casing 21% yield losses of staple grain. He added that rust colonies increase in February month due to excessive use of nitrogenous fertilizers. We can easily identify rust if we rub the leaf and found yellow powdery material. He emphasized that farmers should not confused with nutrient deficiency symptoms. This disease affects source-sink relationship of plant and ultimately reduces grain yield. He added that to avoid rust, resistant varieties should be cultivated e.g. Anaj, Bhkaar Star, Ghazi, Akbar, AaS, while rust susceptible varieties should be avoid to cultivate e.g., Galaxy, Faisalabad, Shafaq, Lasani, Gandum etc.. He also recommended that wheat sowing should be completed in the first week of November because late sown wheat is more susceptible to rust attack. Excess nitrogen application should be avoided as it increases succulence which leads to rust and aphid attack as well. He laminated that our farmers in general do not use potash although the application of potash increases crop immunity to disease and insect attack. Weeds should also be controlled timely; weeds may also serve as alternate host. Talking about wheat yellowing, he assured farmers that such crop yellowing is due to fluctuations in diurnal temperature, soil texture, salinity, late sowing and herbicide phytotoxic effects and there is no need to spry fungicides as a curative approach. While responding to a question about current scenario of wheat rust, he responded that so far situation is quite good and if any symptom/colony of yellow rust is observed especially on susceptible wheat cultivars, instead of worrying just destroy the patch that contains aeciospores from alternate host. In order to produce urediniospores on wheat, these will require at least one month and that too will happen till February. He also related sowing time of wheat with disease incidence and postulated recommendations in this regard.

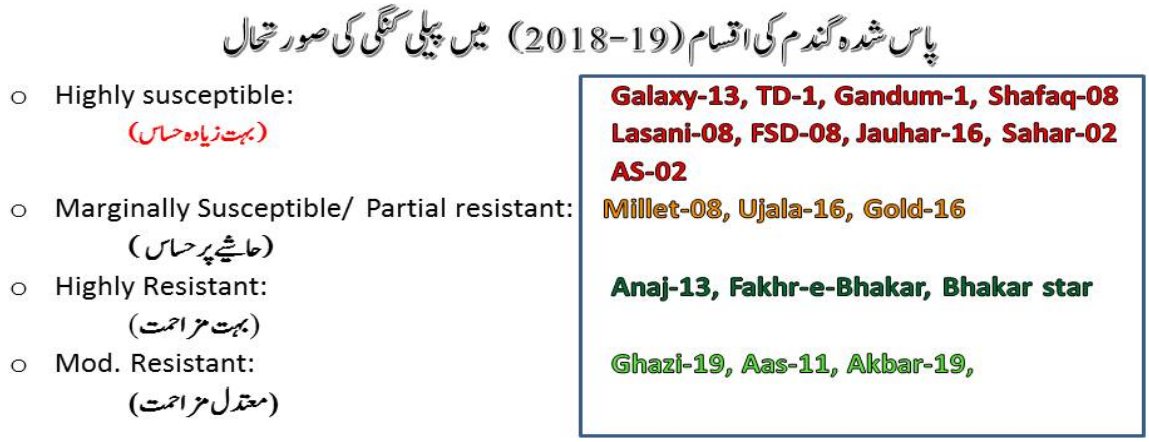




1. Kohinoor	1. Uqab -00	1. Millat -11
2. Faisal - 85	2. Ufaq -00	2. Ujala-16
3. Pasban – 90	3. Bhakar – 02	3. Pakistan-13
4. Rohtas	4. AS – 02	4. Gold-16
5. Inqalab-91	5. Manthar – 03	5. Jauhar-16
6. Punjnad -96	6. Fareed – 06	6. Akbar-19
7. MH -97	7. Sahar- 06	7. Ghazi-19
8. BWP -97	8. Shafaq – 06	8. Fakhr-E-Bhakar
9. Derwar -97	9. Mairaj – 08	9. Bhakar Star
10. Punjnad -1	10.Lasani – 08	10. Galaxy-13
11. BWP -00	11. Faislabad – 08	11. Gandum-1
12. Iqbal – 00	12.Chakwal- 50	
	13.Aas-11	

گندم کی پنجاب میں کاشتہ اب تک کی مشہور اقسام

**Varieties mentioned in red and green color font are rust susceptible and resistant, respectively.*

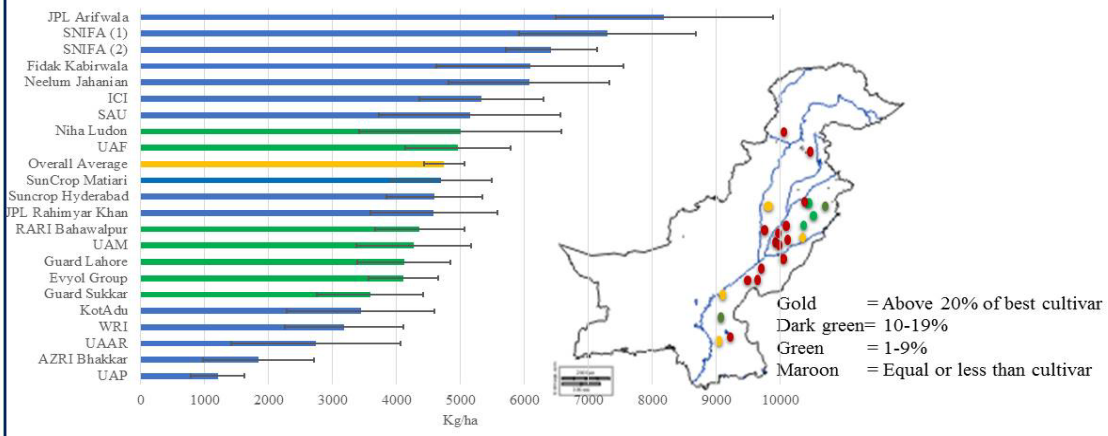


Speaker 5: Mr. Ali Sher (Institute of Plant Breeding and Biotechnology, MNSUAM)

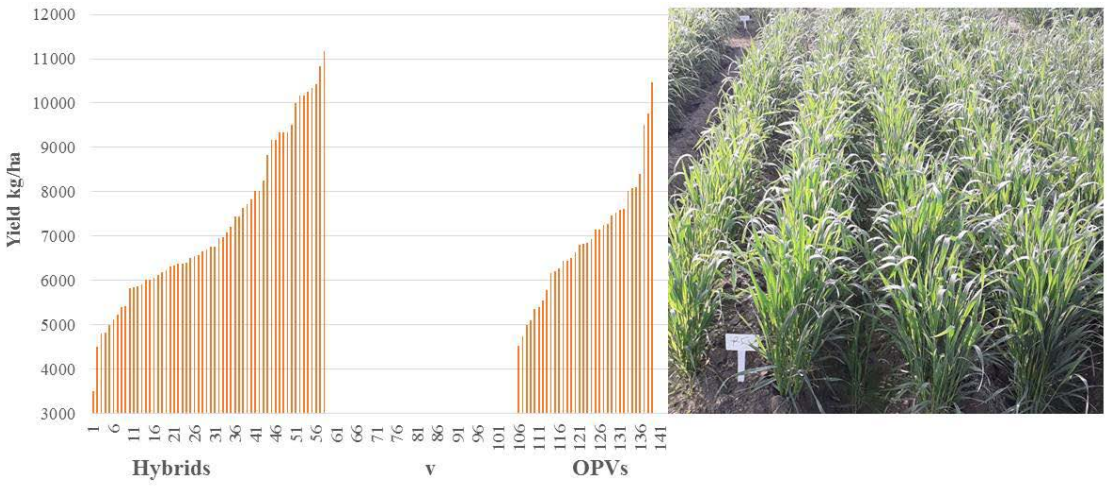
Topic: **Hybrid Wheat for Food Security**

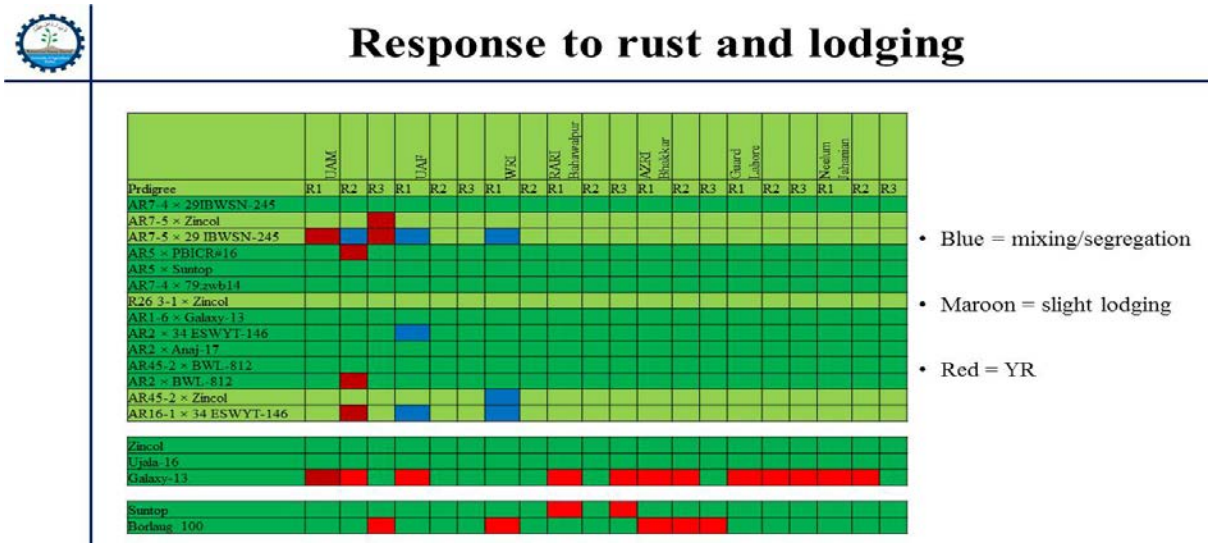
Mr. Ali Sher highlighted the importance of hybrid wheat for regional and global food security. Furthermore, he elaborated the pioneer work of MNSUAM related to hybrid seed production of wheat in Pakistan and success stories in this regard. He said the hybrid wheat seed production is under progress i.e. sorting out males, isolation distance requirements from wheat Other pollen-producing crops, seeding rate optimizations, flowering synchronization, crop management, disease response in CDRI nursery. He said that 600 hybrids are under evaluation. He added that hybrid seed has yield potential of 10 t ha^{-1}. He said National Assembly Standing Committee on National Food Security and Research, recognized and highly appreciated the work of MNSUAM related to hybrid wheat production and also directed PARC to take on board MNSUAM for promotion of wheat hybrids. The hybrids have 20% yield advantage as compared to the OPVs. Furthermore, these hybrids also manifested rust resistance which is a major challenge for sustainability of wheat production in the country. The University wheat breeders are working in joint venture with the private sector. In response to a question regarding seed rate of hybrids, Mr. Ali Sher said that seed rate and other aspects of production technology are being optimized and full package in this regard will be available in next three years.

Technology response



Performance in METs



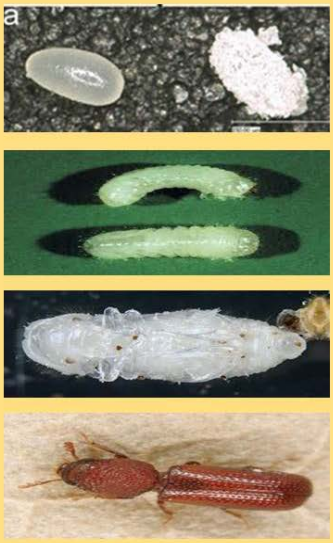


Speaker 6: **Dr. Mirza. Abdul Qayyum (Institute of Plant Protection, MNSUAM)**

Topic: **Post-harvest Losses and Management in Wheat**

Dr. Mirza Abdul Qayyum discussed about postharvest losses in wheat and its management. Dr. Qayyum said that 8-10% postharvest losses occur in wheat when stored as seed or grain. These losses occur due to high moisture (more than 12%) in wheat grain, due to insects (wheat flour beetle, red flour beetle) rodents (mice, rats, squirrels etc.) and birds. These vertebrates attack due to improper storage structures, therefore utmost care must be taken to safeguard grains/seed from these harmful organisms. He suggested that before storage, grains must be air dried up to safe moisture limits (less than 10%). After drying grains and seeds should be stored in sealed structures (bins, containers and hermatic bags) until further use. Fumigation should also be carried out by adopting all precautionary measures. For this purpose, neem leaves can also be used. He briefed the participants about significant storage pests, their developmental stages and control measures. Lastly, he guided about precautionary measures to secure yield losses during and postharvest.

گندم کی سسری



انڈہ

سنڈی

پیوپا

بالغ

گندم کی محفوظ ذخیرہ کاری کے لیے نمی کا تناسب

SEED MOISTURE CONTENT.	STORAGE LIFE
11-13	six months
10-12	one year
9-11	two years
8-10	four years

Safe Storage Chart for Cereals (Wheat and Rice)

Grain Temperature		Grain Moisture (%)										
°C	°F	14	15	16	17	18	19	20	21	22	23	24
30	86	40-120	20-30	8-15	5-8	3-5						
27	81	120-160	40-60	10-30	10-15	5-8	5-8	3-5				
25	77	160-240	40-120	20-60	20-30	10-15	5-15	5-8	5-8	3-5		
20	68	<270	80-160	40-120	40-60	20-30	10-20	10-15	10-15	5-10	5-8	5-8
15	59	>270	160-240	80-150	60-120	40-60	20-30	20-30	10-30	10-15	10-15	5-8
10	50	>270		160-240	90-160	80-120	50-80	40-60	20-30	15-30	10-20	10-15
5	41	>270			<270	120-240	80-120	50-90	40-60	30-50	20-30	10-20

بعد از برداشت نقصانات سے بچاؤ

- برداشت کے فوراً بعد گیلے دانوں کو خشک کرنا
- دانوں کو یکساں خشک کرنا
- گودام کی صفائی کے بعد ذخیرہ کرنا
- گودام کو مناسب طریقے سے حوابند کر کے فیومیگیشن کرنا
- گودام کی باقاعدگی سے معائنہ کرنا

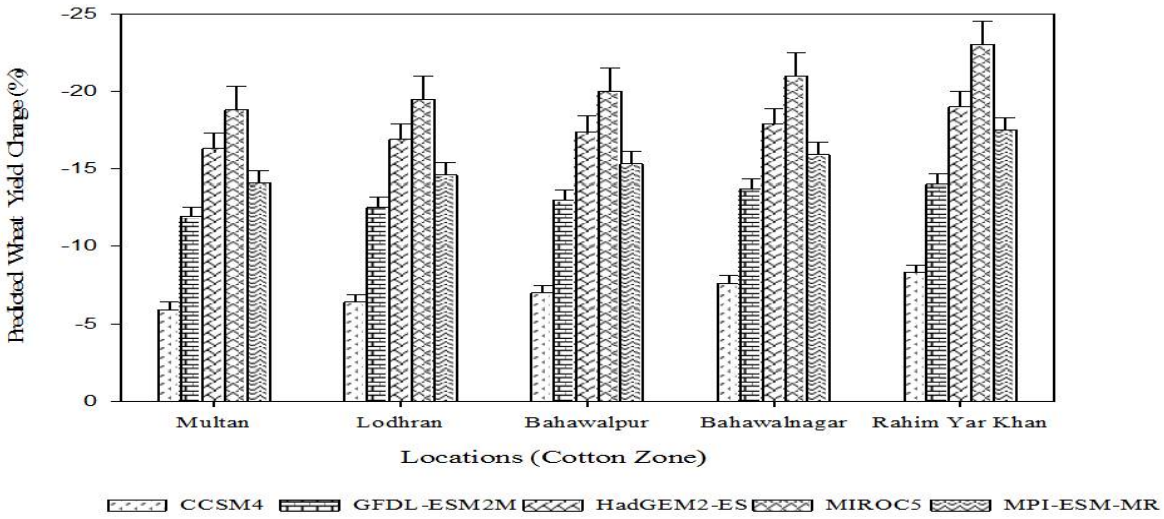
دوران برداشت نقصانات سے بچاؤ

- دانوں کو مناسب نمی پر تھریشنگ کرنا
- اچھی کارکردگی کی حامل تھریشر کے استعمال سے دانوں کی ٹوٹ پھوٹ سے بچاؤ
- پرانے اور غیر معیاری باردانہ کی بجائے بہتر کوالٹی باردانہ کا انتخاب
- بعد از برداشت گندم کی گریڈنگ کرنا

Speaker 7: **Dr. Muhammad Tariq (Department of Agronomy, BZU)**

Topic: **Quantification of Integrated Climate Change Impact Assessment for Cotton-Wheat Cropping Systems in Southern Punjab, Pakistan**

Dr. Muhammad Tariq represented research work on behalf of Prof. Dr. Shakeel Ahmad. The salient points of his presentation were; climate change in Punjab region is already occurring with temperature increases of up to 1 °C, record-breaking floods, and drought. Temperatures are projected to increase an average of 2 °C by 2050. Heavy rainfall and increasing flooding may occur during wet seasons; dry seasons could get drier. Rainfall is will decrease up to 42% in wheat growing season. Wheat yield losses could range from 6-19% by 2050. Poverty might increase by about 6% due to climate change in Punjab by 2050. Adaptation package evaluated consisted of new varieties, earlier sowing dates, increase in fertilizer, and higher sowing density. Adaptations of drought-resistant and heat-tolerant varieties, management improvements, water conservation, efficient irrigation, agricultural insurance, and farm mechanization could reduce poverty by 24% to 65% under both emission scenarios. Most farms will benefit from adopting the adaptation package with a reduction in poverty and an increase in per capita income. Phenology was accurately simulated by CERES-Wheat model with low values of prediction deviation (PD) between observed and simulated days sowing to anthesis, and anthesis to physical maturity. Grain yield and biomass were accurately simulated with low RMSE and higher index of agreement (d).

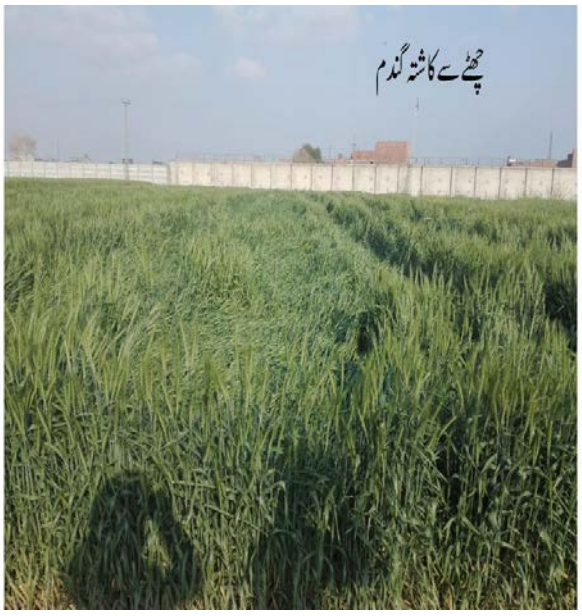


Speaker 8: **Dr. Abdul Ghaffar (Department of Agronomy, MNSUAM)**

Topic: **Wheat Production under Changing Climate: Success Stories of MNSUAM**

Dr. Abdul Ghaffar briefed the participants that Pakistan ranks as the 7th country most vulnerable to climate change on a global scale. Due to climate change unforeseen drought spells and recurrent floods are anticipated. In Punjab, the temperature has risen to 0.65 °C than last century's historic average. The climatologists have predicted a further rise to the tune of 0.2-0.6 °C in ensuing decades. The effects of climate change on crop production are related to shrinking water resources, land degradation and declining crop productivity. He advocated the use of green manures, crop rotation, incorporation of legumes in cropping

systems, and residue management to sustain soil health. He presented developmental phases of MNSUAM Experimental Farm at Jalalpur Pirwala and success stories in this regard along with action measures taken so far. He said that instead of flat sowing, farmers should adopt bed or ridge planting of wheat as these methods save water and crop remains safe against lodging. He said at Experimental Farm of MNSUAM, 10 maunds more yield was recorded under augmented furrow technique as compared to the conventional drill sowing and also irrigated fields received 9.5 acre-inch of water for the whole crop duration. Keeping in view the latest climate scenarios, planting window may be extended till November 25. Timely swing of wheat can be accomplished by sowing wheat as a relay crop in standing cotton. He also advised the farmers to apply water and fertilizers in a judicious manner so that resource use efficiency is maximized. At the end, he thanked all the invited speakers, farmers, representatives of public and private sector, R&D organizations, industrial partners, students and campus community for active participation in this wheat workshop.



مختلف گندم کی بجائی کے طریقوں کا پیداواری تقابلی جائزہ

نمبر شمار		کاشت بذریعہ چھٹہ	ڈرل کاشتہ فصل	کھیلیوں پر کاشت
1	پیداوار (من فی ایکڑ)	33	41	50
2	تعداد آبپاشی (بشمول راؤنی)	4	4	4
3	آبپاشی کی مقدار (ایکڑ انچ)	13	13	9-5
4	پانی کی بچت	کھیلیوں پر کاشتہ فصل میں 27 فیصد پانی کی بچت پائی گئی		

Address of Chief Guest

Mr. Barak Ullah, Additional Secretary Agriculture, South Punjab appreciated the successful held of this very important event about staple crop wheat. He said that this crop is not only important for food security in country but it also affects political environment of the country. He suggested that such events should be live streamed in future. He emphasized that farmers should adopt practices suggested by experts in order to feed increasing number of populations. He asked that recommendations of this workshop should be circulated among policy makers, farmers, public and private sector research organizations. Furthermore, highlights of event should also be broadcasted through print, electronic media and social media. At the end Chief guest distributed shields among resource persons of the workshop.

Farm visit

Farmers and stakeholders were demonstrated various research and demonstration trials at campus. Mr. Ali Sher demonstrated hybrid wheat plot to the farmers and responded to their queries. He presented the scope of wheat production enhancement through hybrid wheat. He highlighted the scope of wheat self-sufficiency through Hybrid Wheat Program initiated at MNSUAM. He shared the progress made in including the results of hybrid wheat trials and multiplication plans. He shared the statistics of yield at different experimental sites with maximum yield up to 113 maunds per acre. The pre-basic blue seed and basic white sterile seed and certified hybrid seed will ensure the purity of seed to the farmers and will result in better performance in field. It was further pointed out that seed placement of wheat hybrids in the field may be done with an already tested wheat planter designed and developed at AMRI Multan.

Dr. Amar Matloob demonstrated weed management trials. The participants were guided about proper spraying technique and use of nozzle along with prayer calibration for satisfactory results. He laminated that haphazard and indiscriminate herbicide usage has caused evolution of herbicide resistant weed biotypes in canary grass. He demonstrated erroneous spraying techniques, fault lines in this regard and consequences for weed and crop

growth. Weed seed of noxious weeds were also shown to the participants. He said that herbicides should not be considered as sole mean of weed control and these should be used in integration with non-chemical methods of weed control. Although use of herbicides is easy, save time, labor and money; yet environmental cost associated with falsified herbicide applications are substantial. Famers do not perceive the extent of weed related problems until things go from bad to worse. The herbicide related constraints are:

- Inadequate knowledge of herbicide selection under a given set of agro-ecological conditions
- Neglecting the previous field history and target weed flora
- Poor timing of application
- Use of wrong nozzle
- Under or over dose of product resulting either in poor weed control or toxicity to the main crop
- Tank mixing incompatible products
- Spraying using less/unfit water as a carrier
- Spraying without calibration
- Repeated use of herbicide/s with same mode of action

Augmented furrow method of wheat sowing was also demonstrated. Dr. Abdul Ghaffar, Dr. Mudassir Aziz and Mr. Mahmood Alam demonstrated farmers about this innovative method of wheat sowing for water saving. Crop growth was better compared to flat sown crop and weed growth was also less. They told that seed emergence and stand establishment are good under this method. Farmers, students and faculty members inquired about different aspects of augmented furrow method. Afterwards, farmers also witness wheat sown by zero tillage after cotton. The stand was good and better than wheat sown after conventional tillage operations. Training ended after fruitful discussion. The farmers were encouraged to visit the research and demonstration trials at any time to observe further progress.

Glimpses of Field Visit

Souvenir Distribution

Recommendations

- Wheat sowing preferably be completed till November 20. Early planting may avoid terminal heat stress so that grain filling occurs during cooler temperatures. In case of late sowing, deadline is December 10.
- Use rust resistant varieties e.g. Anaj, Fakhr e Bhakkar, Bhkaar Star, Ghazi-19, Akbar-19, Ujala-16. Avoid cultivation of susceptible varieties like Shafaq-06, Sehar-06, Lasani-08, Faisalabad-08, Galaxy-13, AS-02, TD-1, NN-Gandum-1 and Johar-16 etc. It was desired that these varieties should be delisted from Production Plan of Punjab Agriculture Department.

SOWING TIME	**RECOMMENDATION**	**DAYS TO BOOTING**	**PREVENTIVE ACTION (Fungicide use*)**	**ANY OTHER**
1ST November to 10th November	All approved varieties seed can be sown تمام اقسام	20-30 January	**1st week of February**	In case of Highly Susceptible Variety
11th November to 20th November	Anaj-17, Aas-11, Borlauge, Akbar-2019, Gold-16, Ujala-16, Bhakar star, Fakhra-e-Bhakar, Ghazi-19, Zincol-16	01-10 February	**1st week of February**	May needs repetition of fungicide (3rd week of Feb.)
21st November to on word **BUT** (Not later than 30th November)	Zincol-16, Anaj-17, Fakhar-e-Bhakar, Ghazi-19	11-20 February	**1st week of February**	Definitely need fungicide spray (3rd week of Feb.)

* Propiconazole, Difenaconazole + Azoxystrobin, and Tebuconazole + Trifloxistrobin

- Farmers are encouraged to cultivate 3-4 wheat varieties and to replace the old ones with certified seed (having >85% germination percentage) of newly released varieties to harness the yield potential of these high yielding varieties.
- Use of potash should be encouraged as it increases immunity of wheat against diseases. Nitrogen to phosphorus application ratio should be 1.5:1.
- Over irrigation and excessive nitrogen application is discouraged as it will reduce yields and shrink profit margins by increasing cost of production. Irrigation should be applied
- By planting wheat on ridges/raised beds, we can have more yield and water productivity along with other advantages (easy drainage, less lodging, energy and time savings, less greenhouse gas emissions) of these planting techniques. However, these methods are not advised for saline soils.

- For saline soil, wheat should be sown following Gapchat, and dry method.
- Augmented furrow sowing method should be adopted, since it saves water up to 40% and also improved yield can be obtained (10 maunds more as compared to conventional methods).
- Fertilizer application should be completed till booting stage after sowing and supplementation should be according to crop needs and soil analysis report.
- Seed and grains should be dried up to safe moisture level less than 10% followed by storage in sealed structures.
- For wheat cultivation under stressful environments, prefer these varieties

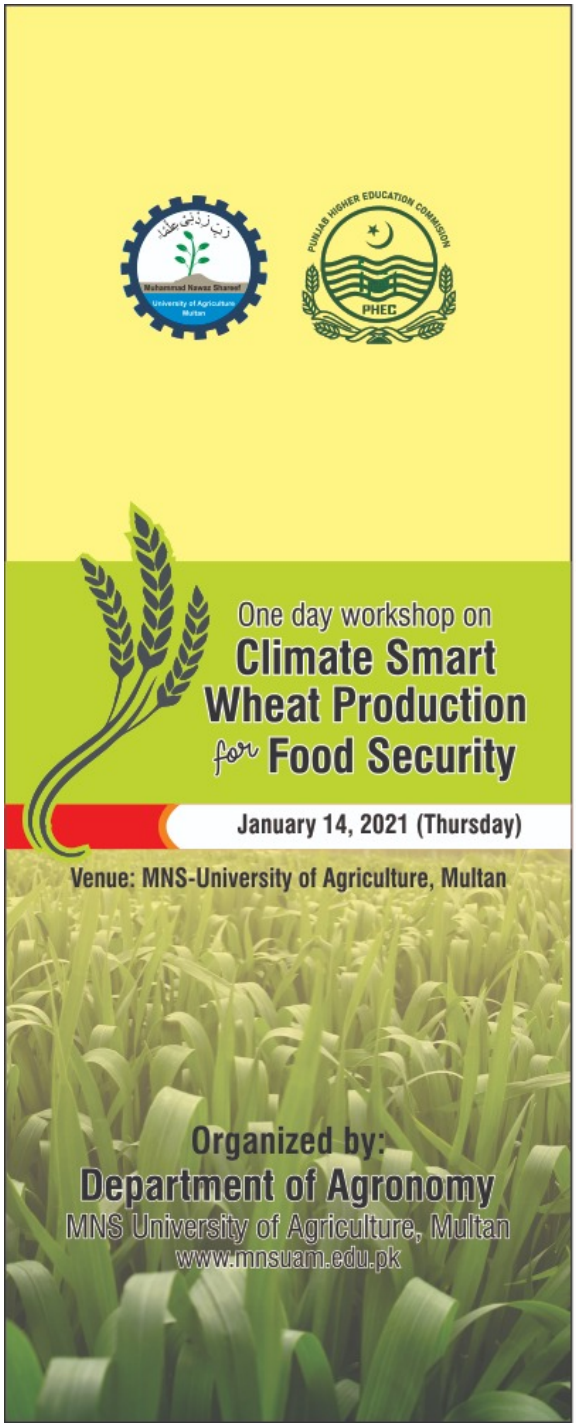
Drought and heat tolerant varieties	Johar-16, Gold-16, Ihsan-16, Fatehjhang-16, Faisalabad-2008, Dharabi-2011 and Chakwal-50.
Salt tolerant varieties	Pasban-90, Inqlab-91, Johar-16, Sarsabaz (grow up to ECe 12 dS m^{-1}).

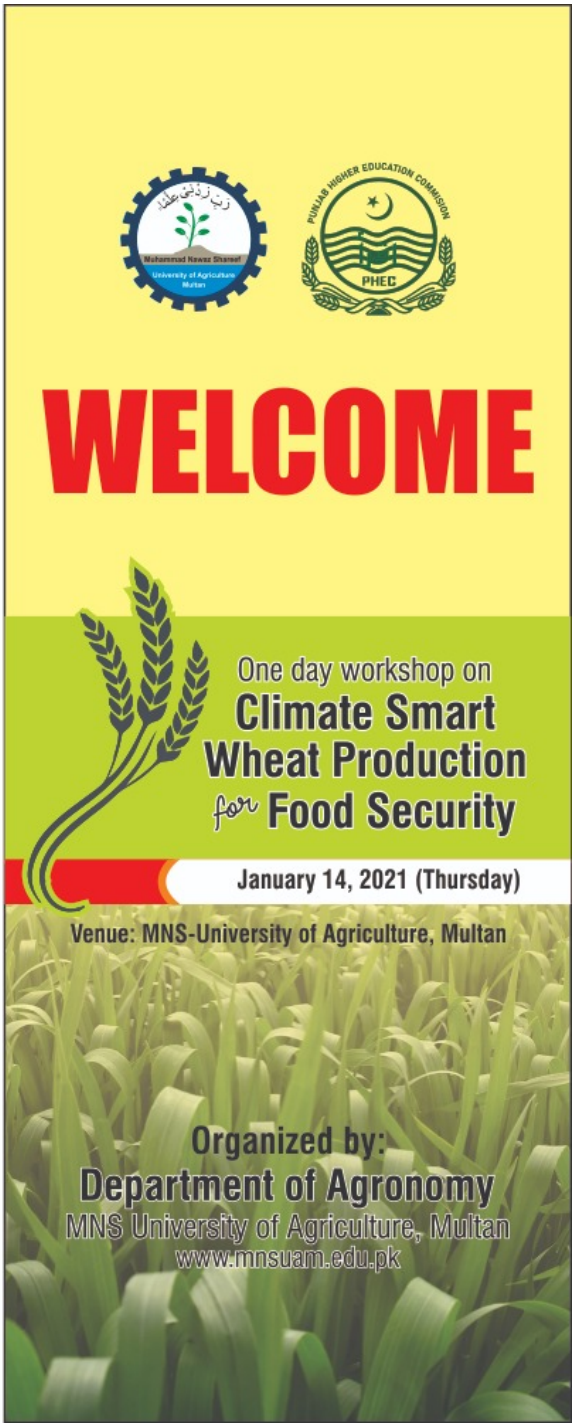
- Herbicides for broadleaf and grassy weeds should be used at 2-4 leaf stage of weeds after 1st and 2nd irrigation respectively. For post emergence herbicides, use Teejet or Flat fan nozzle and always calibrate spray volume before use and adjust herbicide dose accordingly.
- Pesticides should be used in consultation with experts as per instructions mentioned on label and keeping in view the weather forecast.
- In case of continuous use of tube well water, green manuring of sesbania, guar bean or berseem is recommended.

Printed Material

Program
January 14, 2021 (Thursday)

Time	Activity/Presentation	Resource Person
9:30 am	Reception and Seating of Guests	-
10:00 am	Qiraat and Naat	-
10:10 am	Opening Remarks	Prof. Dr. Asif Ali Vice Chancellor, MNSUAM
10:20 am	Comparison of Sowing Methods for Saving Water and Improving Productivity of Wheat	Dr. Hafiz Muhammad Nasrullah ARS, Khanewal
10:35 am	Farmer Weed Related Apprehension in Cotton-wheat Cropping System and the Way Out	Dr. Nazim Hussain Labar BZU, Multan
10:50 am	Plant Nutrition Management in Wheat Under 4-R Nutrient Stewardship Technique	Mr. Imran Hameed Fatima Group
11:05 am	Quantification of Integrated Climate Change Impact Assessment for Cotton-Wheat Cropping Systems in Southern Punjab, Pakistan	Dr. Shakeel Ahmad BZU, Multan
11:20 am	Integrated Management of Wheat Rust	Dr. Arshad Baloch RARI, Bahawalpur
11:35 pm	Hybrid Wheat for Food Security	Prof. Dr. Zulfiqar Ali IPB2, MNSUAM
11:50 pm	Wheat Production Under Changing Climate: Success Stories of MNSUAM	Dr. Abdul Ghaffar Department of Agronomy, MNSUAM
12:05 pm	Post-harvest Losses and Management in Wheat	Dr. Mirza Abdul Qayyum IPP, MNSUAM
12:20 pm	Question Answer Session	Expert Panel
12:45 pm	Remarks by the Chief Guest	Mr. Saqib Ali Ateel Secretary Agric., South Punjab
12:55 pm	Vote of Thanks	Prof. Dr. Shafqat Saeed Dean, FAES, MNSUAM
1:00 pm	Field Visit/Demonstrations	Mr. Mahmood Alam Farm Manger, MNSUAM
2:30 pm	Refreshment	


One day workshop on
Climate Smart
Wheat Production
for Food Security
January 14, 2021 (Thursday)
Venue: MNS-University of Agriculture, Multan
Organized by:
Department of Agronomy
MNS University of Agriculture, Multan
www.mnsuam.edu.pk


WELCOME
One day workshop on
Climate Smart
Wheat Production
for Food Security
January 14, 2021 (Thursday)
Venue: MNS-University of Agriculture, Multan
Organized by:
Department of Agronomy
MNS University of Agriculture, Multan
www.mnsuam.edu.pk


Muhammad Nawaz Shareef
University of Agriculture
Multan
PUNJAB HIGHER EDUCATION COMMISSION
PHEC
One day workshop on
Climate Smart
Wheat Production
for Food Security
January 14, 2021 (Thursday)
Venue: MNS-University of Agriculture, Multan
Organized by:
Department of Agronomy
MNS University of Agriculture, Multan
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WELCOME
Muhammad Nawaz Shareef
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Department of Agronomy
MNS University of Agriculture, Multan
www.mnsuam.edu.pk

CERTIFICATE

Awarded to

Mr./Ms./Dr. _____

For _____

One day workshop on

Climate Smart Wheat Production

for **Food Security**

January 14, 2021 (Thursday)

Venue: MNS-University of Agriculture, Multan

Dr. Abdul Ghaffar
Chairman - Department of Agronomy
MNS University of Agriculture, Multan-Pakistan

Prof. Dr. Asif Ali
Vice Chancellor
MNS University of Agriculture, Multan-Pakistan

MNS-UNIVERSITY OF AGRICULTURE, MULTAN
OLD SHUJABAD ROAD, MULTAN
REGISTRAR OFFICE: GENERAL SECTION
Tel: 061-9201541, E-mail: zulfiqar.tabassum@mnsuam.edu.pk

No: MNS-UAM/RO-04-N/30
Date: 06.01.2021

Notification

The Vice-Chancellor has been pleased to accord approval to organize one day workshop on **"Climate Smart Wheat Production for Food Security"** on January 14, 2021 (Thursday) at 10:00 A.M at MNS-University of Agriculture, Multan being organized by the Department of Agronomy by constituting the following committees for all types of arrangements to organize the said activity in smooth manner. The event will cover informative presentations/lectures followed by interactive discussion, Q&A session, and field demonstrations on the proposed topic.

Printing, Publicity and Souvenirs Committee

Functions: To print out the designs approved and provided by the technical committee, publicity advertisement and coverage on electronic and print media in collaboration with main committee constituted to look after spring festival in general. Arrangements of shields, gifts and souvenirs for the guests.

Dr. Amar Matloob	(Agronomy)	Convener
Dr. Amir Bakhtavar	(IPBB)	Member
Dr. Shahid Iqbal	(Agronomy)	Secretary

Invitation and Registration Committee

Function: Preparation of list of potential stakeholders of the event. Dispatch of invitation letters well in time. Record of invitation letters dispatched.

Dr. Khuram Mubeen	(Agronomy)	Convener
Mr. Hassan Raza	(Agronomy Student)	Member
Mr. Usama	(Agronomy Student)	Member
Mr. Zohaib Khalid	(M.Sc.-Student Agronomy)	Member
Mr. Nabeel Ahmad Ikram	(Agronomy)	Secretary

Stage, Venue and hall Management Committee

Function: Necessary arrangements for the stage accessories like LED's, Sound system, roster, flowers, tissue paper, Stage Secretary, PPT's, laptop, list and profile of honorable guests, to arrange the place for the prestigious foreign and local delegates at the venue and mineral water.

Dr. Muqarrab Ali	(Agronomy)	Convener
Dr. Amir Bakhtavar	(IPBB)	Member
Dr. Amar Matloob	(Agronomy)	Member
Dr. Rao Muhamamd Ikram	(Agronomy)	Member
Dr. Shahid Iqbal	(Agronomy)	Secretary

Reception and Security Committee

To receive, pick and drop services for the foreign and local guests and also arrangements of food and refreshment at the place of stay. Provision of all transport facilities to the conference working team and parking arrangements on the day of event.

Dr. M. Asif Raza	(Director Estate Management)	Convener
Dr. Wazir Ahmad	(Chief Security Officer)	Member
Dr. Mudassir Aziz	(Agronomy)	Member
Dr. Amir Bakhtavar	(IPBB)	Secretary

01-02

Refreshment/Food Committee

To arrange tea and meals for the local and foreign delegation

Dr. Rao M. Ikram	(Agronomy)	Convener
Mr. Muhammad Tahir	(Agronomy)	Member
Mr. M. Zeeshan Kareem	(Agronomy)	Member
Dr. Amar Matloob	(Agronomy)	Secretary

Media Coverage Committee

Function: To make media coverage of the event by contacting all channels and promotion by social media and website

Mr. M. Ali Raza	(PRO)	Convener
Dr. Amar Matloob	(Agronomy)	Member
Rana Muhammad Naeem	(Publication/Communication Specialist)	Secretary

Report/Documentation Committee

To prepare a complete report and documentation of all sessions during the conference

Dr. Shahid Iqbal	(Agronomy)	Convener
Dr. Amar Matloob	(Agronomy)	Member
Dr. Asif Shahzad	(Agronomy)	Member
Mr. Nabeel A. Ikram	(Agronomy)	Secretary

Field Demonstration Committee

To demonstrate field trials and interventions to the farmers and necessary arrangements in this regard

Dr. Abdul Ghaffar	(Agronomy)	Convener
Dr. Amar Matloob	(Agronomy)	Member
Dr. Mudassir Aziz	(Agronomy)	Member
Dr. Khuram Mubeen	(Agronomy)	Member
Mr. Mahmood Alam Khan	(Deputy Director Farms)	Secretary

Resource Mobilization and Fund Raising Committee

To generate financial resources for upcoming event

Dr. Shahid Iqbal	(Agronomy)	Convener
Dr. Amar Matloob	(Agronomy)	Member
Dr. Khuram Mubeen	(Agronomy)	Member
Dr. Muqarrab Ali	(Agronomy)	Secretary

Zulfiqar Ali Tabassum
Deputy Registrar (G) 06/01/2021
For Registrar

Distributions:-

1. Acting Deans/Directors/Chairmen of all Teaching Departments/ Institutes, MNS-UAM
2. Conveners, Members and Secretaries of the different Committees
3. Treasurer
4. Resident Auditor
5. Chief Security Officer
6. Secretary to the Vice Chancellor
7. Notification file.

Media Coverage

چیف ایڈیٹر: ضیا شاہد

ملتان

Daily KHABRAIN

روزنامہ خبریں

ایڈیٹر: امتنان شاہد

جلد 29 | جمعۃ المبارک یکم جمادی الثانی 1442ھ 15 جنوری 2021ء 2 ماگھ 2077ب صفحات 12 قیمت 20 روپے | شمارہ 225

جدید زرعی پیداواری ٹیکنالوجی کاشتکاروں تک پہنچانا ہوگی: بارک اللہ

موسمیاتی تبدیلیوں نے شعبہ کو بہت زیادہ نقصان پہنچایا: ایڈیشنل سیکرٹری زراعت

ملتان (عوامی رپورٹر) ایڈیشنل سیکرٹری زراعت جنوبی پنجاب بارک اللہ نے کہا ہے کہ موسمیاتی تبدیلیوں کی وجہ سے زراعت کو بہت زیادہ نقصان پہنچا ہے۔ زرعی ماہرین اس حوالے سے ہونے والے نقصان سے بچنے کے لئے تحقیق کریں اور تحقیق کے بعد جدید زرعی پیداواری ٹیکنالوجی کاشتکاروں تک پہنچانا ہوگی۔ انہوں نے یہ بات ایم این ایس زرعی یونیورسٹی میں آن کلائی میٹ سمارٹ ویٹ پروڈکشن فار فوڈ سیکورٹی کے حوالے سے ہونے والی ایک روزہ کانفرنس سے خطاب کرتے ہوئے کہی۔ ایم این ایس زرعی یونیورسٹی کے وائس چانسلر ڈاکٹر آصف علی نے خطاب کرتے ہوئے کہا کہ موسمیاتی تبدیلیوں سے ہونے والے نقصان کو کم کرنے کے لئے یونیورسٹی زرعی محکموں کے ساتھ ملکر کام کررہی ہے۔ بہاالدین زکریا یونیورسٹی کے شعبہ ایگرانومی کے ڈاکٹر ناظم حسین لاہر سمیت مختلف ماہرین اور کاشتکاروں نے بھی خطاب کیا۔

زرعی یونیورسٹی میں کانفرنس سے ایڈیشنل سیکرٹری بارک اللہ، ڈاکٹر آصف اور ڈاکٹر ناظم حسین خطاب کررہے ہیں

ہمارے لیے اللہ ہی کافی ہے اور وہی سب سے بہتر مددگار ہے القرآن

ملتان لاہور راولپنڈی اسلام آباد کراچی پشاور سے بیک وقت شائع ہونیوالا موثر ترین قومی انگلش بلیکس نمبر 9-4577928 فون نمبر 7-4577925

بانی: مجیب الرحمٰن شامی

روزنامہ پاکستان ملتان

THE DAILY PAKISTAN MULTAN

ایڈیٹر: عمر مجیب شامی

جلد 16 | جمعۃ المبارک یکم جمادی الثانی 1442ھ 15 جنوری 2021ء 2 ماگھ 2077ب منفات 10 قیمت 20 روپے | شمارہ 359

ملتان: ایم این ایس زرعی یونیورسٹی میں شعبہ ایگرانومی کے زیر اہتمام موسمیاتی تبدیلیوں کی وجہ سے زراعت کو پہنچنے والے نقصانات کے حوالے سے منعقدہ کانفرنس سے آصف علی اور دیگر خطاب کر رہے ہیں

زرعی یونیورسٹی جدید ٹیکنالوجی سے ہائبرڈ ڈبچ تیار کر رہی ہے، بارک اللہ

جڑی بوٹیوں کی بروقت تلفی سے گندم کی اضافی پیداوار حاصل کی جا سکتی ہے

ملتان (سپیشل رپورٹر) ایم این ایس زرعی یونیورسٹی میں شعبہ ایگرانومی کے زیر اہتمام موسمیاتی تبدیلیوں کی وجہ سے زراعت کو پہنچنے والے متوقع نقصانات کو کم کرنے کے حوالے سے ایک روزہ کانفرنس آن کلائی میٹ سمارٹ ویٹ پروڈکشن فار فوڈ سیکیورٹی کا انعقاد کیا گیا۔ کانفرنس کے مہمان خصوصی ایڈیشنل سیکرٹری زراعت ساؤتھ پنجاب بارک اللہ اور وائس چانسلر جامعہ پروفیسر ڈاکٹر آصف علی تھے۔ کانفرنس میں مختلف جامعات، تحقیقی اداروں اور کسانوں نے شرکت کی۔ COVID-19 کی موجودہ صورتحال کو مدنظر رکھتے ہوئے کم لوگوں اور مناسب فاصلے کا خاص انتظام کیا گیا تھا۔ انہوں نے کسانوں کو بتایا کہ زرعی یونیورسٹی جدید ٹیکنالوجی سے ہائبرڈ ڈبچ تیار کر رہی ہے جو کہ اپنے آخری مراحل پر ہے اس بیج کے استعمال سے کسانوں کو بہت فائدہ حاصل ہوگا اور اس پر بیماریاں بھی نہیں لگیں گی۔ انہوں نے کہا کہ موسمیاتی تبدیلیوں کا مسئلہ صرف پاکستان کا ہی نہیں بلکہ باقی ممالک کا بھی ہے موسمیاتی تبدیلیوں کی وجہ سے کسانوں اور کاشتکاروں کو بہت نقصان ہو رہا ہے۔ چیئرمین شعبہ ایگرانومی زرعی جامعہ ڈاکٹر عبدالغفار نے کانفرنس سے خطاب کرتے ہوئے کہا کہ کسانوں کی چاہیے کہ وہ گندم کی بجائی، کھاد، سپرے اور جڑی بوٹیوں کی تلفی کیلئے ماہرین کے بتائے گئے طریقوں کے مطابق کریں تاکہ وہ اپنی گندم کی فصل سے فائدہ اٹھا سکیں اور نقصان سے نجات حاصل کریں۔ انہوں نے مزید کہا کہ جڑی بوٹیوں کی بروقت تلفی سے گندم کی 5 من اضافی پیداوار حاصل کی جا سکتی ہے۔

قسم ہے قلم کی اور جو کچھ لکھتے ہیں ، القرآن

ABC CERTIFIED ملتان اسلام آباد رحیم یار خان لاہور کراچی مظفرآباد پشاور فرینکفرٹ لندن ہانگ کانگ بیک وقت شائع ہونے والا پہلا اردو اخبار 061-6211811 061-6211812 061-6211813

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اعلیٰ صحافتی اوصاف کا علمبردار

روزنامہ اوصاف ملتان

DAILY AUSAF MULTAN

چیف ایڈیٹر: مہتاب خان

ایڈیٹر: محسن بلال خان

جلد: 19 | جمعۃ المبارک 30 جمادی الاول 1442ھ 15 جنوری 2021ء 2 ماگھ 2077 ب صفحات 12 قیمت 20 روپے | شمارہ: 153

ملتان: ایم این ایس زرعی یونیورسٹی میں شعبہ ایگرانومی کے زیر اہتمام موسمیاتی تبدیلیوں کی وجہ سے زراعت کو پہنچنے والے نقصانات کے حوالے سے منعقدہ کانفرنس سے ایڈیشنل سیکرٹری زراعت ساؤتھ پنجاب بارک اللہ، وائس چانسلر جامعہ پروفیسر ڈاکٹر آصف علی و دیگر خطاب کر رہے ہیں

کسانوں کو جدید طریقہ کاشت سے فائدہ اٹھانا چاہیے

ایڈیشنل سیکرٹری زراعت

پاکستان کے شعبہ زراعت کو کئی مسائل کا سامنا ہے جن میں پانی کی کمی اور موسمیاتی تبدیلیوں سے ہونے والے نقصان زیادہ ہیں

ایم این ایس زرعی یونیورسٹی میں شعبہ ایگرانومی کے زیر اہتمام موسمیاتی تبدیلیوں بارے کانفرنس، ڈاکٹر آصف علی کا بھی خطاب

ملتان (خصوصی رپورٹر) ایم این ایس زرعی یونیورسٹی میں شعبہ ایگرانومی کے زیر اہتمام موسمیاتی تبدیلیوں کی وجہ سے زراعت کو پہنچنے والے متوقع نقصانات کو کم کرنے کے حوالے سے ایک روزہ کانفرنس بعنوان ''Climate Smart Wheat Production For Food Security'' کا انعقاد کیا گیا، مہمان خصوصی ایڈیشنل سیکرٹری زراعت ساؤتھ پنجاب بارک اللہ اور وائس چانسلر (باقی صفحہ 7 بقیہ نمبر 96)

جامعہ پروفیسر ڈاکٹر آصف علی تھے، کانفرنس میں مختلف جامعات، تحقیقی اداروں اور کسانوں نے شرکت کی۔ اس موقع پر COVID-19 کی موجودہ صورتحال کو مدنظر رکھتے ہوئے محدود لوگوں اور سماجی فاصلے کا بھی خیال رکھا گیا۔ ایڈیشنل سیکرٹری زراعت ساؤتھ پنجاب بارک اللہ نے زرعی یونیورسٹی کی جانب سے کلائمیٹ سمارٹ ویٹ پروڈکشن فار فوڈ سیکیورٹی کانفرنس کروانے پر خوشی کا اظہار کیا۔ انہوں نے کہا کہ پاکستان کے شعبہ زراعت کو کئی مسائل کا سامنا ہے جن میں پانی کی کمی اور موسمیاتی تبدیلیوں سے ہونے والے نقصان زیادہ ہیں۔ انہوں نے کہا کہ کسانوں کو چاہیے کہ وہ ماہرین کے مطابق جدید طریقہ کاشت کو اپنائیں تا کہ فائدہ حاصل کیا جا سکے۔ انہوں نے کہا کہ حکومت کسانوں کی فلاح کیلئے کام کر رہی۔ انہوں نے مزید کہا کہ اس طرح کی کانفرنس کے انعقاد سے نہ صرف ہمارے ملک کے سائنسدانوں اور کسانوں کی رہنمائی بہتر انداز سے کی جا سکتی ہے بلکہ زراعت کے بارے میں بہتر پالیسی بنانے میں مدد ملے گی۔ کانفرنس سے خطاب کرتے ہوئے وائس چانسلر جامعہ پروفیسر ڈاکٹر آصف علی نے کہا کہ جامعہ زرعیہ ملتان کا پہلے دن سے ہی موسمیاتی تبدیلیوں اور اس کے اثرات پر نظر ہے۔ آج کی کانفرنس اسی سلسلے کی کڑی ہے۔ انہوں نے کہا کہ موسم کی تبدیلیوں کی وجہ سے فصلات متاثر ہو رہی ہیں۔ چیئرمین شعبہ ایگرانومی زرعی جامعہ ڈاکٹر عبدالغفار نے کانفرنس سے خطاب کرتے ہوئے کہا کہ کسانوں کو چاہیے کہ وہ گندم کی بجائی، کھاد، سپرے اور جڑی بوٹیوں کی تلفی کیلئے ماہرین کے بتائے گئے طریقوں کے مطابق کریں تا کہ وہ اپنی گندم کی فصل سے فائدہ اٹھا سکیں اور نقصان سے نجات حاصل کریں۔ انہوں نے مزید کہا کہ جڑی بوٹیوں کی بروقت تلفی سے گندم کی 5 من اضافی پیداوار حاصل کی جا سکتی ہے۔ کانفرنس سے خطاب کرتے ہوئے چیئرمین شعبہ ایگرانومی بہاءالدین زکریا یونیورسٹی ملتان ڈاکٹر ناظم حسین لابر، ایگرانومسٹ ریسرچ اسٹیشن خانیوال ڈاکٹر حافظ محمد نصر اللہ، پلانٹ پیتھالوجسٹ ریجنل ایگریکلچر ریسرچ انسٹی ٹیوٹ بہاولپور ڈاکٹر محمد ارشد حسین، فاطمہ فرٹیلائزر کے نمائندے عمران حمید، ڈاکٹر مرزا عبدالقیوم اور ڈاکٹر علی شیر نے مختلف موضوعات پر خطاب کیا

باقاعدہ تصدیق شدہ اشاعت ABC CERTIFIED پاکستان کے سب سے بڑے روزنامہ کا اعزاز

THE DAILY JANG MULTAN

روزنامہ جنگ ملتان

بانی.....میر خلیل الرحمٰن

جلد 19 | جمعہ کم جمادی الثانی 1442ھ 15 جنوری 2021ء | 4 ماگھ 2077ب | شمارہ 15

صفحات 10 قیمت 20 روپے

THE DAILY JANG MULTAN 15 January 2021

سیکرٹری زراعت جنوبی پنجاب کا ایم این ایس زرعی یونیورسٹی کا دورہ

دورے کے دوران تحقیق کیلئے لگائی گئی گندم کی بائیبرڈ و دیگر اقسام کے ٹرائلز کا معائنہ

ملتان (سٹاف رپورٹر) سیکرٹری زراعت جنوبی پنجاب ثاقب علی گھلیل نے ایم این ایس زرعی یونیورسٹی ملتان کا دورہ کیا۔ دورہ کے دوران یونیورسٹی کے تحت تحقیق کیلئے لگائی گئی گندم کی بائیبرڈ و دیگر اقسام کے ٹرائلز کا معائنہ کیا۔ اس موقع پر وائس چانسلر پروفیسر ڈاکٹر آصف علی، ڈائریکٹر اورک ڈاکٹر ذوالفقار علی، اسسٹنٹ ڈائریکٹر انفارمیشن زراعت عبدالصمد سمیت دیگر افسران بھی موجود تھے۔ سیکرٹری زراعت کو بریفنگ کے دوران بتایا گیا کہ جامعہ ہذا میں گندم کی بائیبرڈ اقسام پر تحقیق کا عمل جاری ہے۔ اب تک جامعہ میں گندم کی 240 سے زائد بائیبرڈ اقسام کے ٹرائلز لگائے گئے ہیں۔ اس موقع پر سیکرٹری زراعت نے کہا کہ گندم کی بوائی کیلئے شرح بیج میں کمی، پٹڑیوں پر کاشت، آبپاشی کیلئے پانی کے کم استعمال اور موسمیاتی تبدیلیوں کو مدنظر رکھتے ہوئے گندم کی زیادہ پیداوار کے حصول کیلئے ٹرائلز کئے جائیں۔ انہوں نے مزید کہا کہ غذائی ضروریات کو پورا کرنے کیلئے گندم کی فی ایکڑ پیداوار میں اضافہ ناگزیر ہے۔

DAILY
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MULTAN

روزنامہ

بانی حمید نظامی مرحوم
معمار مجید نظامی مرحوم
ایڈیٹر رمیزہ مجید نظامی

نوائے وقت

ملتان

لاہور کراچی راولپنڈی/اسلام آباد گوجرانوالہ اور ملتان سے بیک وقت شائع ہوتا ہے

جمعۃ المبارک یکم جمادی الثانی 1442ھ 15 جنوری 2021ء 2 ماگھ 2077ب

ایم این ایس زرعی یونیورسٹی میں شعبہ انجمانومی کے زیر اہتمام کانفرنس سے ایڈیشنل سیکرٹری زراعت ساؤتھ پنجاب بارک اللہ، وی سی ڈاکٹر آصف علی و دیگر خطاب کر رہے ہیں

حکومت کسانوں کی فلاح کیلئے کام کر رہی ہے: بارک اللہ

موسمی تبدیلیوں کی وجہ سے فصلیں متاثر ہو رہی ہیں: ڈاکٹر آصف علی و دیگر کا کانفرنس سے خطاب

ملتان (نمائندہ نوائے وقت) ایم این ایس زرعی یونیورسٹی میں شعبہ انجمانومی کے زیر اہتمام موسمیاتی تبدیلیوں کی وجہ سے زراعت کو پہنچنے والے متوقع نقصانات کو کم کرنے کے حوالے سے ایک روزہ کانفرنس آن کلائی میٹ سمارٹ ویٹ پروڈکشن فار فوڈ سکیورٹی کا انعقاد کیا گیا۔ ایڈیشنل سیکرٹری زراعت ساؤتھ پنجاب بارک اللہ نے زرعی یونیورسٹی کی جانب سے کلائی میٹ سمارٹ ویٹ پروڈکشن فار فوڈ سکیورٹی کانفرنس کروانے پر خوشی کا اظہار کیا۔ انہوں نے کہا کہ پاکستان کے شعبہ زراعت کو مختلف قسم کے مسائل کا سامنا ہے۔ انہوں نے کہا کہ کسانوں کو چاہیے کہ وہ ماہرین کے مطابق جدید طریقہ کاشت کو اپنائے۔ انہوں نے کہا کہ حکومت کسانوں کی فلاح کیلئے کام کر رہی۔ وائس چانسلر جامعہ پروفیسر ڈاکٹر آصف علی نے کہا کہ جامعہ زرعیہ ملتان کا پہلے دن سے ہی موسمیاتی تبدیلیوں اور اس کے اثرات پر نظر ہے۔ آج کی کانفرنس اسی سلسلے کی کڑی ہے۔ انہوں نے کہا کہ موسم کی تبدیلیوں کی وجہ سے فصلات متاثر ہو رہی ہیں۔

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ملتان، لاہور اور کراچی سے بیک وقت شائع ہونیوالا کثیر الاشاعت آزاد قومی اخبار

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چیف ایڈیٹر: ممتاز طاہر

روزنامہ
آفتاب
ملتان

ایڈیٹر: اسد ممتاز

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جلد نمبر 47 | جمعۃ المبارک یکم جمادی الثانی 1442ھ 15 جنوری 2021ء 31 پوہ 2076ب | ہفت 15 پنے | شمارہ نمبر 131

ملتان: ایم این ایس زرعی یونیورسٹی میں شعبہ ایگرانومی کے زیر اہتمام موسمیاتی تبدیلیوں کی وجہ سے زراعت کو پہنچنے والے نقصانات کے حوالے منعقدہ کانفرنس سے لیڈ جسٹس بیکر ٹری زراعت ساؤتھ پنجاب بارک اللہ، وائس چانسلر جامعہ پروفیسر ڈاکٹر آصف علی ودیگر خطاب کر رہے ہیں

جدید طریقہ کاشت کو اپنا کر کسان زیادہ منافعہ حاصل کر سکتے ہیں، بارک اللہ

زرعی یونیورسٹی جدید ٹیکنالوجی سے ہائبرڈ بیج تیار کر رہی ہے، وائس چانسلر ڈاکٹر آصف علی

ایم این ایس زرعی یونیورسٹی میں موسمیاتی تبدیلیوں کی وجہ سے نقصان کے حوالے سے ایک روزہ کانفرنس کا انعقاد

ملتان (سٹاف رپورٹر) ایم این ایس زرعی یونیورسٹی میں شعبہ ایگرانومی کے زیر اہتمام موسمیاتی تبدیلیوں کی وجہ سے زراعت کو پہنچنے والے توسیع نقصانات کو کم کرنے

صفحہ 7 بقیہ نمبر 32

32 بقیہ

BusinessNews
Friday, January 15, 2021

MNSAU organizes conference on "Climate Smart Wheat Production"

MULTAN: A one-day conference on Climate Smart Wheat Production for Food Security was organized at MNS Agricultural University under the auspices of the Department of Agronomy to mitigate the potential damage to agriculture due to climate change. Special guests of the conference were Additional Secretary Agriculture South Punjab Barakullah and Vice Chancellor University Prof. Dr. Asif Ali. The conference was attended by various universities, research institutes and farmers. Given the current state of COVID-19, special arrangements were made for fewer people and a suitable distance.

Addressing the conference, Additional Secretary Agriculture South Punjab Barakullah expressed happiness over the convening of Wrist Mate Smart Weight Production for Food Security Conference by the Agricultural University.
–Staff Reporter

List of Participants

Sheet 1

Registration for the one day workshop on "Climate Smart Wheat Production for Food Security"
At MNSUAM
Dated: January 14, 2021 (Thursday), Department of Agronomy

Sr. No.	Name	Designation / Organization	Contact Number
1	Sohail Irshad	PhD Agronomy/MNSUAM	0321 6861806
2	Abdul. Lateef	M.Sc (Hons) Agronomy/MNSUAM	0304-6914362
3	Kiran Munawar	M.Sc (Hons) Agronomy/MNSUAM	03455320809
4	M. Aqeed Mehdi	M.Sc (Hons) Entomology	6364-9438192
5	Shoaib Akhtar	M.Sc (Hons) Entomology	366-0123147
6	M Mahmood Iqbal	SO, Cotton Res. Inst. Multan	0307-6955696
7	Dr. M. Arshad Baloch	RARI, BWP	0300-6823639
8	Usman Ghani	Senior office Tech. Fatima Fert.	0301-8113082
9	Dr. Umar Ijaz Ahmed	A.P. Agribusiness & Applied Economics	0300-8547247

Registration for the one day workshop on "Climate Smart Wheat Production for Food Security"
At MNSUAM
Dated: January 14, 2021 (Thursday), Department of Agronomy

Sr. No.	Name	Designation / Organization	Contact Number
10	HABIB-UR-RAHMAN	Manager Training & Technical Services SAYBAN	0300-8735870
11	Imran Haider	Student	0304-5823406
12	Israr Hussain	Student	0300-4266626
13	Dr. M. Tahir	CRI Scientific Officer	0346-8500131
14	Barkat Ullah	Addl. Secretary Agriculture	
15	H. Abdul Qudoos	Student / MNS-UAM	03039039314
16	Haroon Sb.	Nursery	03002009097
17	Dr Waseem Iqbal	Assistant professor (Coord) MNSUAM	0300-2462011
18	Abdul Latif Khan Tipu	Scientific Officer (PBG) CRI, Mingora	0331-7416068

Registration for the one day workshop on "Climate Smart Wheat Production for Food Security"
At MNSUAM
Dated: January 14, 2021 (Thursday), Department of Agronomy

Sr. No.	Name	Designation / Organization	Contact Number
19	Riaz Hussain	Ahmad Dep / Farma Tayyab	03067547154
20	M. Asif	"	0308-5510887
21	Ghulam Akbar	"	03604251550
22	Tauqeer Qadir	Ghulam Qadir /	6333884454
23	M. Ajmal	Farmer / Multan	03047993410
24	Engr. Dr. Shehzad	Lecturer / MNSUAM	03330540543
25	M. Imad Anwar	Student / MNS-UAM	03006385268
26	Toba Ishfaq	Student / MNS-UAM	03496843953
27	Ammullah Laghari	AAE / Water management Multan	03017558134

Registration for the one day workshop on "Climate Smart Wheat Production for Food Security"
At MNSUAM
Dated: January 14, 2021 (Thursday), Department of Agronomy

Sr. No.	Name	Designation / Organization	Contact Number
28	MAR SHAD Bhatti	Global Green	0340 6307527
29	Ghulam Yaseen	Farmer / Layah	03039357577
30	Fiaz Hussain	" "	0305 7314018
31	H. M. Waqas	Student / MNSUAM	03006627373
32	Shahzaib Shahid	" "	03125300435
33	Zafaryab Haider	Subject Expert / MNS-UAM	—
34	Rao M Shamraz	PhD Ento IPP	0332-6027665
35	Dr. Nasir Nadeem	Assoc. Prof. / MNS-UAM	0333 8382134
36	Asim Razzaq	Student / MNSUAM	—

Registration for the one day workshop on "Climate Smart Wheat Production for Food Security"
At MNSUAM
Dated: January 14, 2021 (Thursday), Department of Agronomy

Sr. No.	Name	Designation / Organization	Contact Number
37	Javed Akhtar	Farmer / Multan	03006300516
38	Malik Qaiser Abbas	" "	03006304828
39	Malik Saleem Akhtar	" "	03027451219
40	Agha Ghulam Akbar	" "	—
41	M. Waqas Yaseen	Student / MNS-UAM	03067564646
42	M Zeeshan Nawaz	Student / MNS-UAM	03330764867
43	M Arslan Rafique	Student / MNSUAM	0308-4286602
44	Rana M Ziaul Haq	Farmer / Shujabad	0302-7329596
45	M. Shahid	Student / MNS-UAM	03012651215

Sheet 2

Registration for the one day workshop on "Climate Smart Wheat Production for Food Security"
At MNSUAM
Dated: January 14, 2021 (Thursday), Department of Agronomy

Sr. No.	Name	Designation / Organization	Contact Number
1	Dr. Ansar Farooq	FFC	0333-5971284
2	Hafiz M. Nasrullah	Agronomic Research St. Khanewal	03336229318
3	Saba Iqbal	" "	03133260706
4	Dr. Akash Fatima	MNSUAM / Asst. Prof. (IPB)	03316013200
5	M. Fahad Javed	Student / MNSUAM	03004140577
6	Shahzad Ahmad Junaid	PhD scholar (Agronomy)	03336363835
7	Dr. Nazim Labar	BZU	
8	M. Saleem	Farmer / Multan	03035023883
9	Owais Hameed	Ph.D Scholar (Entomology)	0341 0599007

Registration for the one day workshop on "Climate Smart Wheat Production for Food Security"
At MNSUAM
Dated: January 14, 2021 (Thursday), Department of Agronomy

Sr. No.	Name	Designation / Organization	Contact Number
10	Zohaib Asad	Ph.D (Scholar)	0346-5997046
11	Muhammad Jaybal	Assistant Agronomist ERI Multan	0301-2466099
12	MAHMOOD ALAM KHAN	LECTURER - IPBB (1000)	0300-6884448
13	Dr. Lal Hussain Akhtar	Director, RARI, BWP	0333-6375475
14	Imran Hameed	Development Manager / Fatima Fertilizer	03006959295
15	Dr. Sami Ullah	Assistant Professor Department of Agrometeorology & Applied Eco MNS	0333-8907194
16	Muhammad Shahid	Ph.D Scholar Entomology IPP	0304-2957879
17	Mehmood Ejaz	MSc (Hons) Agriculture SST	0305-7493894
18	Dr. M. Asif Raza	Associate Prof. Vet. Sci	0333 5552614

Registration for the one day workshop on "Climate Smart Wheat Production for Food Security"
At MNSUAM
Dated: January 14, 2021 (Thursday), Department of Agronomy

Sr. No.	Name	Designation / Organization	Contact Number
19	Dr. Muqarrab Ali	A.P. Agronomy - MNSUAM	03067522 53
20	Dr. M. Mohsin Khan	Lec. Agri. Engin. MNSUA	0332-6538972
21	Eng. Farrukh Ehsan	Lec. " " MNSUA	0345-7703271
22	Eng. M. Kashif	Lec. " "	0308.7148584
23	H. NAEEM AHMAD	Student (MSc. 3rd)	0300-4031098
24	Taswar Hussain	Agri Interne. Bureweiler	0304-9713112
25	Wasi Haider	Farmer "	0302-7594296
26	Majid Ali	Farmer "	0348-7015484
27	ABAR AHMAD	Cotton Research Institute MTN	03027343065

Registration for the one day workshop on "Climate Smart Wheat Production for Food Security"
At MNSUAM
Dated: January 14, 2021 (Thursday), Department of Agronomy

Sr. No.	Name	Designation / Organization	Contact Number
28	Dr Ghayoor Ahmad	ABI(C) CRI Multan	03346035167
29	Muhammad Bashir	Farmer Multan	0300-7324864
30	D A. Masood	AD FARM Multan	03.2-889418.
31	Dr. Nadia	Ass. Prof. women Univ.	
32	M. Wajid	Farmer / Kot addu	03006084466
33	M. Ismail	" "	0342-3233055
34	M. Luqman Jamed	Student	0307-0707232
35	M Khubaib Jamil	Student	0304-4492977
36	M Kashif	Student	0342-6991641

Registration for the one day workshop on "Climate Smart Wheat Production for Food Security"
At MNSUAM
Dated: January 14, 2021 (Thursday), Department of Agronomy

Sr. No.	Name	Designation / Organization	Contact Number
37	Nazar Faried	Assistant Professor.	0333-4882872
38	Nasir Abbas	Student	0306-9232176
39	Engr Shahzad Ahmad	AE AMRI Multan	03226602680
40	Hafeez-ur-Rehman	Lab Atten. Extension - Sahiwal	0306-6903986
41	Shah Jahan Ahmed	Assistant Horticulture Officer	03356600357
42	Zafar Abbas	Asst. Director/Agri Ext MNS	03017571024
43	Liaqat Ali	" " Shujabad	03006330059
44	Zuhaib Khalid	Student (MSc(Hons) Agronomy/MNSUAM)	03017159314
45	M. Naveed	Farmer / Multan	03087558165

Registration for the one day workshop on "Climate Smart Wheat Production for Food Security"
At MNSUAM
Dated: January 14, 2021 (Thursday), Department of Agronomy

Sr. No.	Name	Designation / Organization	Contact Number
46	M. Shafiq	Farmer / Alipur	03048934720
47	Dr. Umair Sultan	Assistant Prof. / MNS-UAM	03227046909
48	M. Arif	Farmer / Shujabad	03072907141
49	[illegible]	M. Raz	[illegible]
50	Sabeeh	Multan Farmer	0309-7001724
51	Faheem	Farmer (Chowk Qureshi)	0302-7430810