Proceeding of online meeting on AICRPW&B: Discussion and finalization of wheat quality work plan 2023-24

Date: 14.08.2023; Time: 9.30AM

- With the permission of the chairman, Dr. Gyanendra Singh, Director, ICAR-IIWBR, Karnal, online meeting started with the formal welcome of all the participants by Dr. BS Tyagi, PI, Coordination. A total of 100 scientists including representatives from AICRP centres across the country participated in the meeting.
- 2. Dr. Sewa Ram, PI wheat quality, presented the work plan of wheat quality for the year 2023-24 and the detailes of which are attached.
- 3. Dr. Sewa Ram also emphasized that recommendations with respect to wheat quality should be followed strictly for conducting trials for identifying superior cultivars for quality. This has become necessary as the value of some of the quality traits are influenced highly by the growing conditions. For example either extremely low Zn content in samples from Sabour centre(<20 ppm) in irrigated timely sown condition or extremely high Zn content (average value >71.1 ppm) at PAU Ludhiana in irrigated late sown conditions were observed.
- 4. The chairman Dr. Gyanendra Singh, recommended that all the centres must supply data on soil Fe, Zn and nitrogen status for further understanding the reasons behind the variations in these traits across locations. He also emphasised that the samples from mandi or farmer's field must be provided by all the centres conducting trials for quality traits quality data of the centre will not be included in the quality report.
- 5. Dr Sewa Ram suggested to reinitiate QCWBN and scientist contributing towards QCWBN should provide only the entries having exceptionally high Fe, Zn and protein content. The Chairman suggested that the issue will be discussed during the workshop meeting.
- 6. PI quality also suggested to initiate trial of ZnSO₄ spray at flowering and seed development stages; as last 5 years experiments by quality division clearly demonstrated the significant positive effect of ZnSO₄ spray on Zn content. Dr. SC Tripathi, PI Resource Management, informed that ZnSO₄ spray experiments were also conmducted by resource management during last 2 years and hence it was decided by the chairman that a zoint recommendation by both Resource Management and wheat quality groups should be given.

The meeting ended with a formal vote of thanks by Dr. BS Tyagi.

(Sewa Ram)

(Gyanendra Singh) Director, IÇAR-IIWBR, Karnal

PI, Wheat Quality

Proposed Work Plan Wheat Quality (2023-24)

Proposed work plan for 2023-24 discussed during the meeting held on 14th August 2023 in virtual mode is given below.

NIVT and IVT

NIVT and IVT entries will be analysed for grain appearance score, test weight, protein content, and sedimentation value in both *aestivum* and durum wheat genotypes. In addition, phenol reaction in bread wheat and yellow berry and yellow pigment in durum wheat will also be analysed.

- NIVT 1A (Irrigated Timely Sown) samples from Ludhiana, Hisar, Durgapura, Delhi, Pantnagar (NWPZ), and Kanpur, RPCAU-Pusa, Varanasi and Sabour (NEPZ) and 5A (NWPZ) (Restricted Irrigation Timely Sown) from Pantnagar, Hisar, Ludhiana, Durgapura, Delhi will be analysed at PAU, Ludhiana.
- NIVT 1B (Irrigated Timely Sown) from Ludhiana, Hisar, Durgapura, Delhi, Pantnagar (NWPZ), Kanpur, RPCAU-Pusa, Varanasi and Sabour (NEPZ) and
 NIVT 6 (NWPZ) from Ludhiana, Hisar, Delhi, Pantnagar samples will be analysed at RAU, Durgapura.
- NIVT 2 (Irrigated Timely Sown) samples from Indore, Vijapur, Junagarh, Powarkheda (CZ), Dharwad, Pune and Niphad (PZ) and
 NIVT 6 (CZ) from Indore, Vijapur, Junagarh, Powarkheda will be analysed at SDAU, Vijapur.
- NIVT 3A (Irrigated Late Sown) Entries from Pantnagar, Hisar, Ludhiana, Durgapura, Delhi (NWPZ) and RPCAU-Pusa, Sabour, Kanpur, Varanasi (NEPZ) AND
 NIVT 5A (NEPZ) (Restricted Irrigation Timely Sown) from RPCAU-Pusa, Sabour, Kanpur, Varanasi will be analysed at GBPUA&T, Pantnagar Centre.
- **NIVT 3B** (Irrigated Late Sown *T. Aestivum*) samples from Vijapur, Indore, Powarkheda, Junagarh (CZ) and Dharwad, Niphad, Pune (PZ) will be analysed by the quality laboratory at ARS, Niphad.
- **NIVT 4** (Irrigated Timely Sown *T. durum*) samples from Vijapur, Indore, Powarkheda, Junagarh (CZ) and Dharwad, Niphad, Pune (PZ) will be analysed by the quality laboratory at ARI, Pune.

- **NIVT 5B** (Restricted Irrigation Timely Sown, both durum and aestivum) samples from Vijapur, Indore, Powarkheda, Junagarh (CZ) and Dharwad, Niphad, Pune (PZ) will be analysed at UAS, Dharwad.
- **IVT (NHZ)** samples from Shimla, Almora and Malan will be analysed at ICAR-IIWBR, Karnal.

AVT and HYPT

 AVT and HYPT samples from all the centres mentioned in NIVTs and IVTs will be analyzed by ICAR-IIWBR, Karnal for various quality parameters including baking evaluation of IInd year entries and checks. Grain hardness index of selected centres of AVT/HYPT will be evaluated at ICAR-IARI, New Delhi.

Mandi/farmer's field samples: All centres to collect samples from Mandi/farmer's field and send to ICAR-IIWBR, Karnal in time.

Soil Fe, Zn and nitrogen analysis: Data to be provided to ICAR-IIWBR by all centres conducting trials for quality analysis after taking due care of soil sample collection and analysis.

All trials should be conducted as per the standard agronomic practices.

• The last dates for supplying the samples by respective centres were finalised as follows:

NHZ	15 th June 2024
NWPZ & NEPZ	20 th May 2024
CZ	15 th May 2024
PZ	30 th April 2024

- All the wheat grain samples, duly cleaned and properly packed in polythene bags separately, enclosed in cloth bags should be sent by registered post parcel.
- All the co-operators, who will analyze the wheat samples of various NIVTs should send the data to ICAR-IIWBR, Karnal positively by 15th July, 2024, by e-mail in the format used in annual report.