RESOURCE MANAGEMENT, 2019-2020

ALL INDIA COORDINATED WHEAT & BARLEY IMPROVEMENT PROJECT

TECHNICAL PROGRAMME WHEAT AGRONOMY 2019-2020

ICAR - INDIAN INSTITUTE OF WHEAT AND BARLEY RESEARCH Agrasain Marg, KARNAL-132001, Haryana

WHEAT AGRONOMY EXPERIMENT NO. IR-DOS

NORTH WESTERN PLAINS ZONE

2019-2020

TITLE: Performance of new wheat genotypes at different dates of sowing under irrigated conditions.

OBJECTIVE: To evaluate the performance of genotypes at different dates of sowing.

TREATMENTS

- A. Dates of sowing (Main-plots): 03
 - D_1 Timely (5th to 11th Nov)
 - D_2 Late (10th Dec. to 16th Dec.)
 - D_3 Very Late (1st Jan. to 7th Jan.)
- B. Genotypes (Sub-plots): 12
 - 1. HD32982. HD3059 (c)5. WH1124 (c)6. PBW771(l)

3. DBW173 (c) 4. WH1021 (c)

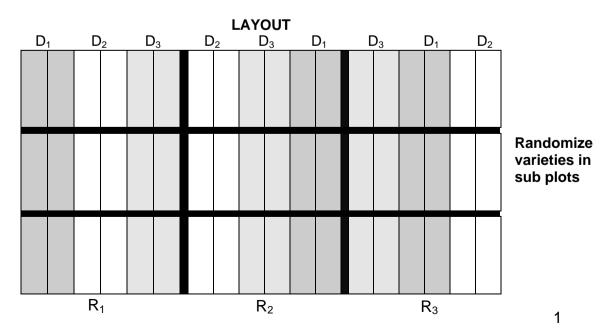
Seed Required: 2.5 kg per location/entry

DESIGN: Split-plot

REPLICATIONS: Three

PLOT SIZE: GROSS: 1.60 m x 8 m = 12.80 sq. m. (8 rows at 20 cm spacing) NET: 1.20 m x 7 m = 8.40 sq. m. (6 inner rows x 7 m long)

- **FERTILISER** 150:60:40 kg N, P_2O_5 and K_2O/ha . Apply 1/3rdnitrogen, full phosphorus and potash to be applied as basal dose and the remaining 2/3rd nitrogen as 1/3rd at first irrigation and 1/3rd at second irrigation.
- **SEED RATE:** 100 kg/ha for timely sown and 125 kg/ha for late and very late sown conditions (Adjust seed rate considering 1000 grains weight as 38 g).
- **CENTRES**: Agra, Delhi, Durgapura, Gurdaspur, Hisar, Jammu, Karnal, Ludhiana, Pantnagar and Sriganganagar.



WHEAT AGRONOMY EXPERIMENT NO. RIR-TS-TAS

NORTH EASTERN PLAINS ZONE

2019-2020

(c)

TITLE: Performance of new wheat genotypes under restricted irrigation conditions.

OBJECTIVE: To evaluate the performance of timely sown genotypes at different irrigation schedules.

TREATMENTS

A. Irrigation levels (Main-plots):03

- I_{1-} No Irrigation
- I₂ One irrigation at CRI (20-25 DAS)
- I_3 Two irrigations at CRI and Boot leaf(80-85 DAS)

B. Genotypes (Sub-plots): 06

1. HD3293	2. HI1612 (c)	3. HD3171 (c)	4. K1317 (
5. HD2888 (c)	6. DBW252(Í)		

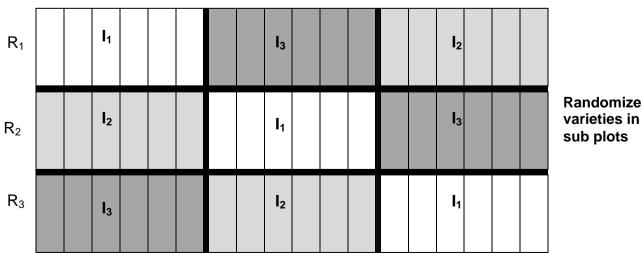
Seed Required: 2.5 kg per location/entry

DESIGN:Split-plotREPLICATIONS:ThreePLOT SIZE:GROSS: 1.60 m x 8 m = 12.80 sq. m. (8 rows at 20 cm spacing)
NET:NET:1.20 m x 7 m = 8.40 sq. m. (6 inner rows x 7 m long)

FERTILISER: 90:60:40 kg N, P_2O_5 and K_2O/ha . Apply full dose of NPK as basal in I_1 and $1/3^{rd}$ nitrogen, full phosphorus and potash as basal in other treatments and the remaining $2/3^{rd}$ nitrogen at first irrigation.

SEED RATE: 100 kg/ha (Adjust seed rate considering 1000 grains weight as 38 g).

CENTRES: Burdwan, Coochbehar, Faizabad, Kalyani, Kanpur, Ranchi, RAU Pusa, IARI Pusa, Sabour, Shillongani, Varanasi.



LAYOUT

WHEAT AGRONOMY EXPERIMENT NO. IR-DOS

CENTRAL ZONE

2019-2020

TITLE: Performance of new wheat genotypes at different dates of sowing under irrigated conditions.

OBJECTIVE: To evaluate the performance of genotypes at different dates of sowing.

TREATMENTS

A. Dates of sowing (Main-plots): 03

- D_1 Timely (5th to 11th Nov)
- D_2 Late (3rd Dec. to 9th Dec.)
- D_3 Very Late (24th Dec. to 31st Dec.)

B. Genotypes (Sub-plots): 06

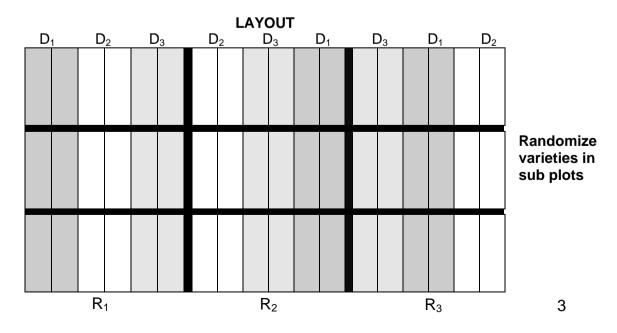
1. CG1029 2. HI 1634 3. HD 2932 (c) 4. HD 2864 (c) 5. MP 3336 (c) 6. MP 4010 (c)

Seed Required: 2.5 kg per location/entry

DESIGN: Split-plot

REPLICATIONS: Three

- PLOT SIZE: GROSS: 1.80 m x 8 m = 14.40 sq. m. (9 rows at 20 cm spacing) NET: 1.40 m x 7 m = 9.80 sq. m. (7 inner rows x 7 m long)
- **FERTILISER** 120:60:40 kg N, P_2O_5 and K_2O/ha . Apply $1/3^{rd}$ nitrogen, full phosphorus and potash to be applied as basal dose and the remaining $2/3^{rd}$ nitrogen as $1/3^{rd}$ at first irrigation and $1/3^{rd}$ at second irrigation.
- **SEED RATE:** 100 kg/ha for timely sown and 125 kg/ha for late and very late sown conditions (Adjust seed rate considering 1000 grains weight as 38 g).
- **CENTRES**: Bilaspur, Gwalior, Indore, Jabalpur, Junagarh, Powarkheda, Udaipur, Vijapur.



WHEAT AGRONOMY EXPERIMENT NO. IR-DOS

PENINSULAR ZONE

2019-2020

TITLE: Performance of new wheat genotypes at different dates of sowing under irrigated conditions.

OBJECTIVE: To evaluate the performance of genotypes at different dates of sowing.

TREATMENTS

A. Dates of sowing (Main-plots): 03 D_1 Timely (5th to 11th Nov) D_2 Late (26th Nov. to 2nd Dec.)

- Very Late (17th Dec. to 23rd Dec.) D₂

B. Genotypes (Sub-plots): 04

- 1. DDW 48 2. DDW 49 (d) 3. HI1633 4. MACS 6478(c)
- 5. MACS 6222(c) 6. MACS 3949(dc) 7. UAS 428 (dc) 8. Raj 4083 (c)
- 9. HD 2932 (c)

Seed Required: 2.5 kg per location/entry

DESIGN: Split-plot

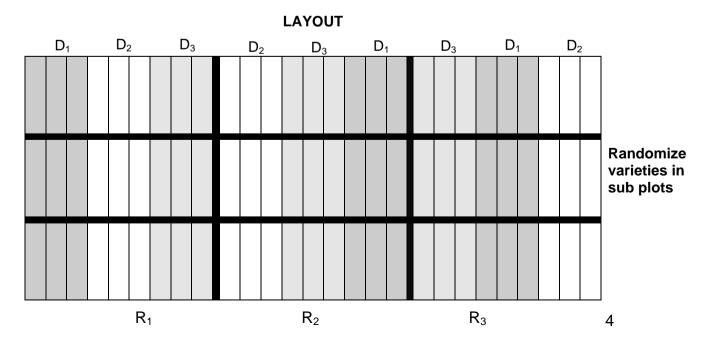
REPLICATIONS: Three

PLOT SIZE: GROSS: 1.80 m x 8 m = 14.40 sq. m. (9 rows at 20 cm spacing) NET: 1.40 m x 7 m = 9.80 sq. m. (7 inner rows x 7 m long)

FERTILISER 120:60:40 kg N, P_2O_5 and K_2O/ha . Apply 1/3rd nitrogen, full phosphorus and potash to be applied as basal dose and the remaining 2/3rd nitrogen as 1/3rd at first irrigation and 1/3rd at second irrigation.

SEED RATE: 100 kg/ha for timely sown and 125 kg/ha for late and very late sown conditions (Adjust seed rate considering 1000 grains weight as 38 g).

CENTRES: Akola, Dharwad, Niphad, Pune, Washim.



WHEAT AGRONOMY EXPERIMENT NO. RIR-TS-TAS

PENINSULAR ZONE

2019-2020

TITLE: Performance of new wheat genotypes under restricted irrigation conditions.

OBJECTIVE: To evaluate the performance of timely sown genotypes at different irrigation schedules.

TREATMENTS

A. Irrigation levels (Main-plots):03

- I_{1-} No Irrigation
- I₂ One irrigation at CRI (20-25 DAS)
- I₃ Two irrigations at CRI and Boot leaf (80-85 DAS)

B. Genotypes (Sub-plots): 07

- 1. NIDW 1149 (d) 2. HI 1605 (c) 3. AKDW 2997-16 (dc) 4. UAS 446 (dc)
- 5. NIAW 3170 (I) 6. HI 8805 (dl)

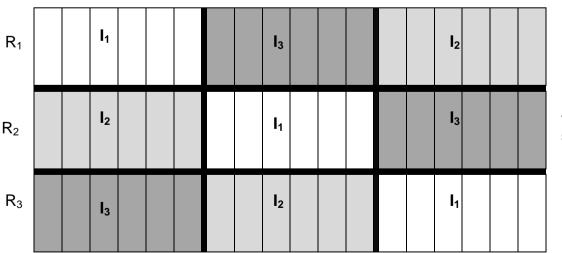
Seed Required: 2.5 kg per location/entry

DESIGN: Split-plot **REPLICATIONS**: Three **PLOT SIZE**: GROSS: 1.80 m x 8 m = 14.40 sq. m. (9 rows at 20 cm spacing) NET: 1.40 m x 7 m = 9.80 sq. m. (7 inner rows x 7 m long) **FERTILISER**: 90:60:40 kg N, P₂O₅ and K₂O/ha. Apply full dose of NPK as basal in I₁ and 1/3rdnitrogen, full phosphorus and potash as basal in other treatments and the remaining 2/3rd nitrogen at first irrigation.

SEED RATE: 100 kg/ha (Adjust seed rate considering 1000 grains weight as 38 g).

LAYOUT

CENTRES: Akola, Dharwad, Niphad, Pune, Washim.



Randomize varieties in sub plots

WHEAT AGRONOMY EXPERIMENT NO. SPL-IR-ES-HYT

NORTH WESTERN PLAINS ZONE

2019-2020

TITLE: Evaluation of wheat genotypes targeted to achieve 8 t/ha productivity **OBJECTIVE:** Finalising the package of practices to achieve targeted productivity.

TREATMENTS

A. Nutrient management option (Main-plots): 03

- NM₁ Recommended Fertiliser Dose (RFD)
- NM₂ RFD+ FYM15 t/ha
- NM₃ 150% RFD+ FYM15 t/ha+Growth Regulators*

*NOTE: Two sprays as tank mix-Chlormequat chloride (Lihocin) @ 0.2%+ tebuconazole (Folicur 430 SC) @ 0.1% of commercial product dose at First Node and Flag leaf (Tank mix application)

B. Genotypes (Sub-plots): 04

1. DBW 187	2. DBŴ 303	3. DBW 327	4. DBW 328	5. DBW 329
6. DBW 330	7. DBW 331	8. DBW 332	9. DBW 333	10. HD 3378
11. WH 1252	12. WH 1270	13. DBW 222	14. HD 3086 (c)	15. HD 2967 (c)

Seed Required: 2.5 kg per location/entry

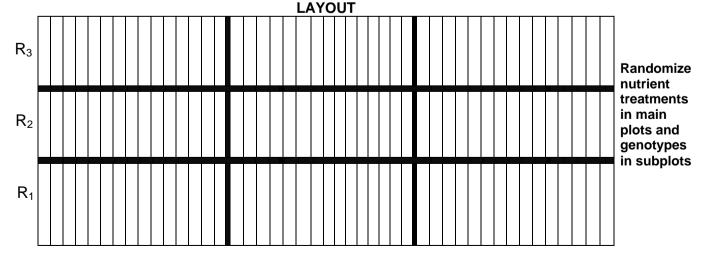
SOWING TIME: 20th to 25th October DESIGN: Split-plot REPLICATIONS: Three

PLOT SIZE: GROSS: 1.80 m x 8 m = 14.40 sq. m. (9 rows at 20 cm spacing) NET: 1.40 m x 7 m = 9.80 sq. m. (7 inner rows x 7 m long)

FERTILISER Apply 1/3rdnitrogen, full phosphorus and potash as basal dose and the remaining 2/3rd nitrogen as 1/3rd at first irrigation and 1/3rd at second irrigation.

SEED RATE: 100 kg /ha for timely sown and 125 kg/ha for late and very late sown conditions (Adjust seed rate considering 1000 grains weight as 38 g).

CENTRES: Delhi, Gurdaspur, Hisar, Karnal, Ladowal (BISA), Ludhiana, Pantnagar.



LIST OF CENTRES AND COOPERATING SCIENTISTS WORKING UNDER RESOURCE MANAGEMENT PROGRAMME OF THE AICW&BIP (2019-20)

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*Funded Centres