**Zonal Monitoring Teams and Schedule (2025-26**

| S. No. | Zone | Date | Centres Visited | Team Members |
|---|---|---|---|---|
| 1 | NHZ Team I | 05 to 09 April 2026 | Shimla , Bajaura, Malan | Drs. Dharam Pal, Vijay Rana, Pramod Prasad and Rakesh Kumar Bairwa |
| 2 | NHZ Team II | 07 to 10 April 2026 | Almora, Majhera, | Drs. Jogendra Singh, OP Ahalawat, SC Gill and Navin Chander Gahtyari |
| 3 | NWPZ Team I | 17 to 19 March 2026 | HAU Hisar, IIWBR Hisar Seed and Research Center, Sri Ganganagar, Bathinda, Ludhiana | Drs. Anil Kumar Khippal, Jaspal Kaur, Simarjit Kaur and Y. Gulia |
| 4 | NWPZ Team II | 23 to 26 February 2026 | Bawal, Navgaon, Durgapura, Tabiji, Udaipur | Drs. Chuni Lal, PS Shekhawat and Kavita Bhadu |
| 5 | NWPZ Team III | 09 to 11 March 2026 | Modipuram, Nagina, Pantnagar, Bulandshahar | Drs. Jogendra Singh and Ravindra Kumar |
| 6 | NEPZ Team I | 25 Feb. to 1 March 2026 | Ranchi, BISA Samastipur, Burdhman | Drs. Santosh Kumar Bishnoi, Ravindra Kumar and Nayiar Ali |
| 7 | NEPZ Team II | 04 to 06 March 2026 | Kanpur,Dilipnagar, Kumarganj, Varanasi, Saini | Drs. Omvir Singh, Vijay Kumar Yadav, Grish Goyal and V. P Chaudhary |
| 8 | CZ Team I | 23 to 27 February 2026 | Gwalior, Jhansi, Banda | Drs. Lokendra Kumar, OP Gupta, Bhagat Singh, Manmohan Baghel |

**A. Trials Rejected by the Zonal Monitoring Teams**

| Trail Rejected | Location | Zone | Reason |
|---|---|---|---|
| IVT-Hulless Barley | Gwalior | CZ | Very low plant population |
| IVT-Dual Purpose Barley | Tabiji | NWPZ | Very poor (~10%) regeneration after first cut |
| IVT-Hulless Barley | Navgaon | NWPZ | Very high incidence of covered smut (~60%) |

**B. Entries recommended by the Zonal Monitoring Teams to be dropped from further testing:**

*(Decision was based on the consistent observations across the locations)*

| Trail Name | Entry No. | Reason |
|---|---|---|
| IVT-Malt Barley (NWPZ) | E8 | No germination at all the locations |
| | E16 | Segregation for rudimentary and non-rudimentary spike-lets, plant height and row type at all the locations. |
| | E19 | Mixture of plants with rudimentary and non-rudimentary spike-lets (50:50) |
| IVT-Feed Barley (NWPZ, NEPZ, CZ) | E22 | Mixture of tall and dwarf plants, waxy and no-waxy spikes |
| | E16 | Mixture of 2-row and 6-row type plants (50:50) |
| IVT-Hulless Barley (NWPZ, NEPZ, CZ) | E26 | Mixture of plants with rudimentary and non-rudimentary spike-lets (50:50), variation in spike |
| IVT/AVT-RF-HLB (NHZ) | E11 | Poor germination (<5%) across all the locations. |
| IVT/AVT-RF-FB-DPB (NHZ) | E12 | 6 –row plants were observed in large number; few off types for plant heights were also observed |

**C. Some of the ancillary trait data was not considered because it was unrealistic.**

- Like Tillers/meter at BISA, Samastipur; 1000-grains weight at Kota; Spike length at Burdwan

**Zonal Monitoring Report 2025-26**

**Zone: NHZ (Team –I)**

**Period of visit:** 05th to 09th April 2026

| **Name of team members:** | **Name of the centre** | **Location (Longitude and Latitude)** |
|---|---|---|
| Drs. Dharam Pal (IARI RS, Shimla), Vijay Rana (CSKHPKV, Palampur), Pramod Prasad (ICAR-IIWBR, RS Shimla), Rakesh Kumar Bairwa, (ICAR-IIWBR, Karnal) | Shimla | Lat 31.09°<br>Long 77.15° |
| | Bajaura | Lat 31.84°<br>Long 77.17° |
| | Malan | Lat 32.11°<br>Long 76.41° |

**Summary of breeding trials allocated & monitored:**

| **Centre** | **Trial(s) Allotted** | **Trials Not Conducted / Rejected** | **Reason/Remark*** |
|---|---|---|---|
| Shimla | IVT/AVT-RF-FB-DP-NHZ, IVT/AVT-RF-HLB-NHZ | All trials conducted | Very good & satisfactory |
| Bajaura | IVT/AVT-RF-FB-DP-NHZ, IVT/AVT-RF-HLB-NHZ | All trials conducted | Very good & satisfactory |
| Malan | IVT/AVT-RF-FB-DP-NHZ, IVT/AVT-RF-HLB-NHZ | All trials conducted | Very good & satisfactory |

**Evaluate trials as very good, good, average and poor based on conduction*

**Promising entries in breeding trials across centres:**

| **Trial** | **Entries** | **Remarks** |
|---|---|---|
| IVT/AVT-RF-FB-DP-NHZ | IVT-RF-FB-DP-4, IVT-RF-FB-DP-13, IVT-RF-FB-DP-16 | Grain purpose on the basis of apparent agronomic score |
| | IVT-RF-FB-DP-1, IVT-RF-FB-DP-4, IVT-RF-FB-DP-8 | Dual purpose on the basis of apparent agronomic score |
| IVT/AVT-RF-HLB-NHZ | IVT-RF-HLB-2, IVT-RF-HLB-14 | On the basis of apparent agronomic score |

**Entries recommended for purification:**

| **Trial** | **Entry** | **Remark** |
|---|---|---|
| IVT/AVT-RF-FB-DP-NHZ | IVT-RF-FB-DP-2 | Few off types of purple anthocyanin pigmented spikes were observed |
| | IVT-RF-FB-DP-8 | Few off types of six rowed plants and non droopy spikes were observed |
| | IVT-RF-FB-DP-20 | Few off types of two rowed plants were observed |
| IVT/AVT-RF-HLB-NHZ | IVT-RF-HLB-13 | Few off types for plant height were observed |

**Entries recommended to be dropped from further testing:**

| Trial | Entry | Remark |
|---|---|---|
| IVT/AVT-RF-FB-DP-NHZ | IVT-RF-FB-DP-12 | 6-rowed plants were observed in large numbers, few off types for plant height were also observed |

**Entries exhibiting higher diseases incidence /insect infestation/poor germination/high lodging:**

| Trial | Remarks |
|---|---|
| IVT/AVT-RF-FB-DP-NHZ | None of the entries showed high incidence of yellow and brown rust. However, only one entry showed yellow rust incidence [IVT-RF-FB-DP-15: (YR 5S)] |
| IVT/AVT-RF-HLB-NHZ | IVT-RF-HLB-11: Very poor plant stand observed across the centres |

**Report on Agronomical Trials:**

| Centre | Trial(s) allotted and conducted | Remark |
|---|---|---|
| Shimla | IR-TS-HLB-DOS, IR-TS-DPB, SPL-6 | All trials conducted.<br>**SPL6: Rejected due to poor plant stand.** |
| Malan | IR-TS-HLB-DOS, IR-TS-DPB, SPL-5, SPL-6 | All trials conducted satisfactorily |

**Report on Pathological Nurseries:**

At Bajaura, IBDSN, NBDSN and EBDSN of barley were conducted satisfactorily. The disease development was satisfactory on all disease screening nurseries. Yellow rust development was satisfactory with up to 40 S severity of yellow rust on susceptible checks.

**Farmers Interaction under VKSA during monitoring**

| Location | Number of Farmers Interacted | Remarks |
|---|---|---|
| Bajaura, Nagchala, Sundarnagar, Kangu, Malan, Thural | 22 | Farmers interaction during the monitoring tour. |

**Any other trial (Physiological trial/nucleus seed production/Nurseries)**

**Special comments, if any (2-3 bullet points only)**

- The incidence of covered smut was observed on few entries of IVT/AVT-RF-HLB-NHZ trial.

**Signature(s)**

**(Dharam Pal)** **(Vijay Rana)** **(Pramod Prasad)** **(RK Bairwa)**

# Zonal Monitoring Report 2025-26

## Zone: NHZ – Team II – BARLEY

**Period of visit: 07 – 10 April 2026**

| Name of team members: | Name of the centre | Location (Longitude and Latitude) |
|---|---|---|
| Dr. Jogendra Singh | ICAR-IIWBR, Karnal | Almora |
| Dr. OP Ahalawat | ICAR-IIWBR, Karnal | Majhera |
| Dr. SC Gill | ICAR-IIWBR, Karnal | |
| Dr. Navin Chander Gahtyari | ICAR-VPKAS, Almora | Gaja (Ranichauri) |

**Summary of Breeding trials allocated & monitored:**

| Centre | Trial(s) Allotted | Trials Not Conducted / Rejected | Reason/Remark* |
|---|---|---|---|
| Almora | IVT/AVT-RF-FB-DP-NHZ; IVT/AVT-RF-HLB-NHZ | No | Very good |
| Majhera | IVT/AVT-RF-FB-DP-NHZ; IVT/AVT-RF-HLB-NHZ | No | Very good |

**Evaluate trials as very good, good, average and poorbased on conduction*

**Photgoraphs of the trial**

**Promising entries in breeding trials across centers-: (Ranking of entries to be done in the booklet)**

| Trial | Entries | Remarks |
|---|---|---|
| IVT/AVT-RF-FB-DP-NHZ; | IVT-RF-FB-DP-4, IVT-RF-FB-DP-14, IVT-RF-FB-DP-19 | Promising entries observed across all centers. |
| IVT/AVT-RF-HLB-NHZ | IVT-RF-HLB-2, IVT-RF-HLB-14 | |

**Entries recommended for purification (Take photograph):**

| Trial | Entry | Remark |
|---|---|---|
| IVT/AVT-RF-FB-DP-NHZ; | NIL | - |
| IVT/AVT-RF-HLB-NHZ | NIL | - |

**Entries recommended to be dropped from further testing:**

| Trial | Entry | Remark |
|---|---|---|
| IVT/AVT-RF-HLB-NHZ | IVT-RF-HLB-11 | Poor germination (<5%) across all the location. |

**Entries exhibiting higher diseases incidence /insect infestation/poor germination/high lodging (Take photograph):**

No disease incidence (yellow and brown rust) was observed across the locations in both barley breeding trials.

**Report on Agronomical Trials:**

| Centre | Trial(s) allotted and conducted | Remark |
|---|---|---|
| | IR-TS-DPB-NHZ | The trial had three genotypes with two levels of cut with four replications. The trial was well conducted with optimum plant stand. |

**Report on Pathological Nurseries:**

| Centre | Nursery | Remark |
|---|---|---|
| | IBDSN, NBDSN and EBDSN | The nursery was well conducted. Yellow rust disease incidence observed in the infector lines with scores upto 60S. Some to test entries has yellow rust score upto 20S. |
| | | |
| | | |

**Take the photograph of Infector rows**

**Farmers Interaction under VKSA during monitoring**

| Location | Number of Farmers Interacted | Remarks |
|---|---|---|
| | | |
| | | |
| | | |

**Any other trial (Physiological trial/nucleus seed production/Nurseries)**

**Special comments, if any (2-3 bullet points only)**

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**Signatures of all the members**

(Jogendra Singh) 10/4/2026

(OP Ahlawat) 10/04/2026

(SC Gill) 10-04-2026

(NC Gahtyari)

# Proforma for Zonal Monitoring Report 2025-26

## Zone:NWPZ

**Period of visit: 17-19 March 2026**

| Name of team members: | Name of the centre | Location (Latitude and Longitude) |
|---|---|---|
| 1. Dr Anil Kumar Khippal, Pr. Scientists, RM, ICAR-IIWBR, Karnal<br>2. Dr Jaspal Kaur, Pr. Plant Pathologist, PAU, Ludhiana, Punjab<br>3. Dr. Simarjit Kaur, Sr. Barley Breeder, PAU, Ludhiana, Punjab<br>4. Dr Y.Gulia, HAU, Hisar, Haryana | HAU, Hisar, Haryana | $29^0.1'$ N and $75^0.6'$ E |
| | Hisar Centre ,IIWBR, Haryana | $29^0.17'$ N and $75^0.67'$ E |
| | Sri Ganga Nagar, Rajasthan | $29^0.93'$ N and $73^0.88'$ E |
| | RRS, Bathinda, Punjab | $30.19'$ N and $74.94'$ E |
| | PAU, Ludhiana, Punjab | $30^0.91'$ N and $75^0.78'$ E |

**Summary of Breeding trials allocated & monitored:**

| Centre | Trial(s) Allotted | Trials Not Conducted/ Rejected | Reason/Remark* |
|---|---|---|---|
| HAU, Hisar (17.3.26) | IVT-FB, AVT-FB, IVT-DPB, AVT-DPB, AVT-MB, IVT-MB, IVT-HL, AVT-HL | Nil | *very good* |
| IIWBR Hisar Centre (17.3.26) | IVT/AVT salinity | Nil | *very good* |
| Ganganagar, (18.3.26) | AVT-MB, IVT-MB, IVT-HL, AVT-HL | Nil | *very good* |
| Bathinda (18.3.26) | AVT-MB, IVT-MB, IVT-HL, AVT-HL | Nil | *very good* |
| Ludhiana (19.3.26) | IVT-FB, AVT-FB, IVT-DPB, AVT-DPB, AVT-MB, IVT-MB, IVT-HL, AVT-HL | Nil | *very good* |

***Evaluate trials as very good, good, average and poor based on conduction*

**Photographs of the trial**

**Promising entries in breeding trials across centres-: (Ranking of entries to be done in the booklet)**

| Trial | Entries | Remarks |
|---|---|---|
| IVT-FB | E3,E4,E9,E10,E12,E17,E18,E25,E27,E28,E34,E35,E36 | Good germination, high tillering, uniform, early, good spike |
| AVT-FB | E1,E2,E4,E7 | Early, dwarf, high tillering and uniform |
| IVT-DPB | E5 | High tillering, good regeneration, uniform |
| AVT-DPB | E3,E4 | High tillering, good regeneration, uniform |
| AVT-MB | E2,E4,E5,E6 | Good germination, high tillering, uniform |
| IVT-MB | E1,E4,E6,E7,E12,E13,E22,E23,E24 | Good germination, high tillering, uniform |
| IVT-HL | E1, E7,E9, E13,E14,E19,E20, E24,E25, E32,E35 | Good germination, high tillering, uniform, early, good spike |
| AVT-HL | E1,E3,E4,E5,E6,E8 | Good germination, high tillering, uniform, good spike |
| IVT/AVT -Salinity | E3,E4,E5,E7,E8,E9,E20 | Good germination, high tillering, uniform, good spike |

**Entries recommended for purification (Take photograph):**

| Trial | Entry | Remark |
|---|---|---|
| IVT-FB | E2,E6,E8,E11,E13,E17 | • Variation in height of E8,E11,E13,E17<br>• Off types present in E2 and E6 |
| AVT-FB | E1,E4,E5 | • E1,E4,E5 has few off types |
| IVT-DPB | Nil | |
| AVT-DPB | Nil | |
| AVT-MB | Nil | |
| IVT-MB | E9,E10,E14, E25 | • E9 and E10 has variation in height.<br>• E14 has 4-5 off types of 6 R pigmented spikes<br>• E25 has off types of tall height, 6R and non rudimentary spikes |
| IVT-HL | E3, E6, E9,E13,E21,E24,E29 | • 4-9 off types were present |
| AVT-HL | Nil | |
| IVT/AVT-Salinity | E13 | • Off types were present |

**Entries recommended to be dropped from further testing:**

| Trial | Entry | Remark |
|---|---|---|
| IVT-FB | E16,E21 | • Mixture of 2R, 6R, rudimentary and non rudimentary type spike |
| IVT-MB | E8,E15,E16,E19 | • E8 has only 8-9 plants in plot at Hisar, Bathinda and Ludhiana.<br>• E15,E16 and E19 has about 10% mixture of rudimentary/non rudimentary spikes, and variation in height. |
| IVT-DPB | E10,E11,E25 | • E10 has mixture of rudimentary and non rudimentary spikes<br>• E11 has mixture of pigmented and waxy spikes<br>• E25 has variation for plant height, spike length and spike pigmentation. |
| IVT-HL | E26,E28,E30 | • E28 has variation in height<br>• E26 and E30 has mixture of rudimentary and non rudimentary spikes |
| IVT/AVT-Salinity | E19 | • Variation in spike size and colour |

**Entries exhibiting higher diseases incidence /insect infestation/poor germination/high lodging (Take photograph):**

| Trait | Trial: Entries with disease |
|---|---|
| Higher disease incidence | • AVT-MB: E1 has 18 % covered smut<br>• AVT-HL: E7 has 70% covered smut and leaf blight 47<br>• IVT-FB: E14 has leaf blight 67 and E20 has leaf blight 99<br>• AVT-DP: E2 has leaf blight 99<br>• IVT-DP: E8 and E22 has leaf blight 99<br>• IVT-HL : 9 entries such as E2 (70%), E3 (70%), E4(80%),E22 (25%), E23 (30%),E26 (70%), E29 (35%),E34 (60%), E36 (40%) has higher incidence of covered smut at Sri Ganganagar and Bathinda<br>• IVT/AVT-salinity: E4 has leaf blight of 57. |
| Poor germination | • IVT-MB: E8 has only 8-9 plants in plot at Hisar, Bathinda and Ludhiana. |

**Report on Agronomical Trials:**

| Centre | Trial(s) allotted and conducted | Remark |
|---|---|---|
| HAU,Hisar | IR-TS-MB-DOS, IR-TS-HLB-DOS, IR-TS-DPB, IR-SL-LON, SPL-5 and SPL-6 | All the six trials were well conducted having proper plant population and proper weed management |
| PAU,Ludhiana | IR-TS-MB-DOS, IR-TS-HLB-DOS, IR-TS-DPB, IR-SL-LON and SPL-5 | All the five trials were well conducted having proper plant population and proper weed management. IR-SL-LON was conducted at Bhatinda Centre. |

**Report on Pathological Nurseries:**

| Centre | Nursery | Remark |
|---|---|---|
| HAU, Hisar | NBDSN & EBDSN for Stripe rust (245 lines+12 lines) | Nurseries were conducted nicely. |
| | NBDSN & EBDSN for CCN | |
| PAU,Ludhiana | IBDSN for Stripe rust (1214 lines) | Nurseries were conducted nicely. |
| | NBDSN & EBDSN for Stripe and Leaf rust (245 lines+12 Lines) | |

**Photograph of Infector row at PAU,Ludhiana**

**Monitoring at HAU,Hisar**


**Monitoring at Sri Ganga Nagar**


**Monitoring at Bathinda**


**Monitoring at Ludhiana**

**Farmers Interaction under VKSA during monitoring**
**NA**
**Any other trial (Physiological trial/nucleus seed production/Nurseries)**
**-**
**Special comments, if any (2-3 bullet points only)**
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## Signatures of all the members

**Dr Anil Kumar Khippal ,Pr. Scientists, Barley,**
**ICAR-IIWBR, Karnal**

**Dr Jaspal Kaur, Pr. Plant Pathologist,**
**PAU, Ludhiana, Punjab**

**Dr. Simarjit Kaur, Sr. Barley Breeder,**
**PAU, Ludhiana, Punjab**

**Dr Y.Gulia, Sr. Barley Breeder ,**
**HAU, Hisar, Haryana**

# Proforma for Zonal Monitoring Report 2025-26

**Period of visit: 23-26 February, 2026**

**Zone:NWPZ** **Team-2**

| Name of team members: | Name of the centre | Location (Longitude and Latitude) |
|---|---|---|
| 1. Dr. Chuni Lal<br>Pr. Scientists & PI, Barley, ICAR-IIWBR, Karnal<br>2. Dr. PS Shekhawat, Plant Pathologist, RARI, Durgapura<br>3. Dr Kavita Bhadu, Agronomist, RARI, Durgapura | RRS, Bawal | 28º.1′ N and 76º.5′ E |
| | ARS, Navgaon | 27º.34′ N and 76º.38′ E |
| | RARI, Durgapura | 26º.51′ N and 75º.47′ E |
| | ARSS, Tabiji | 26º.37′ N and 74º.59′ E |
| | RCA, Udaipur | 24º.35′ N and 73º.42′ E |

**Summary of breeding trials allocated& monitored:**

| Centre | Trial(s) Allotted | Trials | | Reason/Remark* |
|---|---|---|---|---|
| | | Not conducted | Rejected | |
| Bawal (23.2.26) | AVT-MB, IVT-MB | NIL | NIL | Average |
| Navgaon (23.2.26) | IVT-DPB, AVT-DPB, AVT-MB, IVT-MB, IVT-HL, AVT-HL | NIL | IVT-HL | IVT-HL was rejected due to very high incidence of covered smut (>60 %) |
| Durgapura (24.2.26) | IVT-FB, AVT-FB, IVT-DPB, AVT-DPB, AVT-MB, IVT-MB, IVT-HL, AVT-HL | NIL | NIL | Good |
| Tabiji (25.2.26) | I VT-FB, AVT-FB, IVT-DPB, AVT-DPB, AVT-MB, IVT-MB, IVT-HL, AVT-HL | NIL | IVT-DPB | IVT-DPB was rejected due to very poor plant stand.<br>Rest all the trials were very good. |
| Udaipur (26.2.26) | IVT-FB, AVT-FB, IVT-DPB, IVT-HL, AVT-HL | NIL | NIL | Very good |

*****_Evaluate trials as very good, good, average and poor based on conduction_

**Photographs of the trial**

**Promising entries in breeding trials across the centres-: (Ranking of entries to be done in the booklet)**

| Trial | Entries | Remarks |
|---|---|---|
| AVT- FB-NWPZ-(2025-26) | E-2, E-3 and E-4 | These entries were listed based on their visual score for performance in the trials average across the centres. |
| AVT- DPB-NWPZ-(2025-26) | E-2, E-3 | |
| AVT- HL-NWPZ-(2025-26) | E-2, E-4, E-5 | |
| AVT- MB-NWPZ-(2025-26) | E-3, E-6 | |
| AVT- FB-CZ-(2025-26) | E-2, E-4, E-5, E-6, E-7 | |
| AVT- HLB-CZ-(2025-26) | E-11 | |
| IVT- FB-NWPZ-(2025-26) | E-3, E-5, E-9,E-23, E-30 | |
| IVT- DPB-NWPZ-(2025-26) | E-5, E-12, E-14, E-20 | |
| IVT- HLB-NWPZ-(2025-26) | E-3, E-13, E-25, E-27, E-35 | |
| IVT- MB-NWPZ-(2025-26) | E-4, F-7, E-10, E-18, E-20 | |

**Entries recommended for purification (Take photograph):**

| Trial | Entry | Remark |
|---|---|---|
| AVT- FB-NWPZ-(2025-26) | E-5 | Six off-types for plant height were found at Durgapura and Tabiji |
| AVT- HL-NWPZ-(2025-26) | E-1 & E-2 | Three off-types for plant height in E=1, and six off-types for early-maturity, plant-height, row-type were fund at allthe three locations (Navgaon, Durgapura and Tabiji). |
| AVT- MB-NWPZ-(2025-26) | E-4 | Four off-types for plant height were found at all the four locations. |
| IVT- FB-NWPZ-(2025-26) | E-12, E-13, E-21 &E-24 | Off types for plant height (E-12, E-13, E-21) and 2-row type (E-24) |
| IVT- DPB-NWPZ-(2025-26) | E-13&E-18 | Off types for 2-row type (E-13) and both 2-row type and plant height. |
| IVT- HLB-NWPZ-(2025-26) | E-4, E-7, E-10, E-13, E-22, E-23& E-30 | Off types observed for 6-row type (E-4, E-10, E-22, E-23) and 2-row type (E-7); plant height (E-13) and rudimentary spike lets (E-30) |
| IVT- MB-NWPZ-(2025-26) | E-3 | Up to 4-off-types for plant height were found at all the four locations |

**Entries recommended to be dropped from further testing:**

| Trial | Entry | Remark |
|---|---|---|
| IVT- MB-NWPZ-(2025-26) | E-8 | E-8: No germination at all the locations |
| | E-16 | E-16: Segregation for rudimentary/non-rudimentary spike-lets; plant height; row-type at all the locations |
| | E-19 | E-19: Mixture of plants with rudimentary and non-rudimentary plants 50:50 at all locations |
| | E-25 | E-25: Mixture of several types of plants (6-row, rudimentary/non-rudimentary spike-lets, plant height, waxy-non-waxy spikes) |

| | | |
|---|---|---|
| IVT- FB-NWPZ-(2025-26) | E-16 | 50:50 mixture of 2/6 row types plants |
| IVT- HLB-NWPZ-(2025-26) | E-6<br>E-26 | E-6 has variations for plant height, row-types and maturity;<br>E-26 has 50:50 mixture of plants with rudimentary and non-rudimentary spike lets. |
| AVT- HLB-CZ-(2025-26) | E-13 | A mixture of plants segregating for different plant heights was observed |

**Entries exhibiting higher diseases incidence /insect infestation/poor germination/high lodging**
**(Take photograph):**

**AVT- DPB-NWPZ-(2025-26):**Net Blotch was observed in E-2 (57 score) at Tabiji

**AVT- HL-NWPZ-(2025-26):**Covered smut was observed in E-1 (2%), E-7 (20%), E-5 (2%) at Navagon

**AVT- MB-NWPZ-(2025-26):**Covered smut was observed in E-1 (1-2%)at Tabiji, E-5 (2-5%, at all the locations (Bawal, Navgaon, Durgapura)

**IVT- MB-NWPZ-(2025-26):** Covered smut was observed in E-1 (1%), E-7 (1%) and 1-3% in E-10 at Bawal, Navgaon &Tabiji. The entries namely E-1, E-2, E-4, and E-5 were showing poor germination at all the locations except Tabiji.

**IVT- FB-NWPZ-(2025-26):** Leaf blight in E-3 (23), E-4(13), E-7 (35), E-11 (13), E-20 (23), E-36(35); loose smut in E-20 (*In traces*); powdery mildew in E-20 (4) &E-32 (3); poor-germination in E-11, E 24, E-25 & E-36; and lodging in E-7 (10%), E-10 (50%) &E-14 (40%) were observed.

**IVT- DPB-NWPZ-(2025-26):** Covered smut in E-24, E-25, E-23 &E-22; leaf blight in E-8 (57), E-11(13) & E-22 (57); powdery mildew in E-22 (3); poor germination in E-1, E-2, E-3, E-4, E-6, E-7, E-8, E-9, E-13, E-16 &E-18 were observed at Tabiji,and in E-4 and E-16 at Navgaon location also.

**IVT-HL-NWPZ-(2025-26):**Leaf rust in E-14 (10S)**;** leaf blight in E-9 (23) andcovered smut in E-2 (95%), E-3 (30%), E-4(20%), E-5 (92%), E-9 (in traces), E- (10%), E-11 (2%), E-15 (10%), E-23 (50%), E-24 (2%), E-27 (95%), E-29 (25%), E-34 (50%), E-35 (15%) and E-36 (10%) were noted at Navgaon location; whereas, poor germination was observed in E-1, E-2, E-4, E-5, E-7, E-8, E-9, E-11,E-16, E-18, E-19, E-21, E-24, E-25, E-26, E-28, E-29 &E-33 (in majority of the cases at Navgaon location); lodging in E-12 (50 %) at Udaipur and Tabiji and E-17(80 %).

AVT-FB-CZ-(2025-26): Lodging in E-3 (30%), E-7 (5%).

AVT- HLB-CZ-(2025-26): leaf blight in E-1 (23); lodging in E-1 (20%); very poor germination in E-2, E-6, E-7, E-9, E-10 & E-12

**Report on Agronomical Trials:**

| **Centre** | **Trial(s) allotted and conducted** | **Remark** |
|---|---|---|
| Durgapura | IR-TS-MB-DOS, IR-TS-HLB-DOS,<br>IR-TS-DPB, IR-SL-LON, SPL-5 and SPL-6 | Excellent conductance trials; the treatment effects were discernible. Though salinity trial was conducted as per the technical programme, but the Durgapura centre does not have saline soils at its farm. |
| Udaipur | IR-SL-LON, IR-TS-HLB-DOS, SPL-5 | Two trials IR-TS-HLB-DOS, SPL-5 were excellent at Udapur. One trial IR-SL-LON, was conducted at ARS Balabhpur, in saline plot. |

**Report on Pathological Nurseries:**

| Centre | Nursery | Remark |
|---|---|---|
| Durgapura | Pathology: IBDSN (1214) NBDSN (245) & EBDSN (12) lines for screening against yellow rust. | All the nurseries were planted perfectly; sufficient yellow rust pressure was created for meaningful screening. The infector and susceptible test entries were showing >80Srust score. |
| | Nematology: CCN Screening : NBDSN & EBDSN<br>CCN management trial | CCN screening nurseries and experiments were also perfectly planted and good inoculums of nematodes was present in the soils for meaningful screening. |
| | Entomology: Aphid screening: NBDSN Termite management trial | Aphids screening nurseries and management trials were conducted properly, but the aphid & termite infestation was not there. |
| Udaipur | NBDSN & EBDSN for CCN; CCN Experiment | Both the nursery and the management experiment were conducted nicely. The nematodes population was satisfactory in the field. |

**Take the photograph of Infector rows**

**Farmers Interaction under VKSA during monitoring**

| Location | Number of Farmers Interacted | Remarks |
|---|---|---|
| Navgaon | 7 | Besides farmers, we also interacted with the college students and shared benefits of growing barley |
| Tabiji | Group-1: 40 farmers (KVK, Tabiji)<br>Group-2: 35 farmers (NRCSS, Tabiji) | Advocated to these farmers the importance of barley cultivation. Also shared contacts for seeds availability for both barley and wheat crops |
| Udaipur | 12 | An interaction session was organized with the farmers who came from the tribal areas of Udaipur district. Feedback on their response to barley-cultivation was taken. Importance of cultivation of hull-less barley was explained to them. The farmers showed their keen interest in the hull-less barley cultivation and requested support from the IIWBR, Karnal |

**Any other trial (Physiological trial/nucleus seed production/Nurseries) :**

**Special comments, if any (2-3 bullet points only)**

Covered smut infection was noted at all the cooperative centers but it was very heavy at Navgaon, therefore, a trial IVT-HL was rejected due to very heavy infection of >60% . In IVT-DP trial at Tabiji center, the rejuvenation per cent was very less (20-25 % only) in most of the entries. Hence, it is recommended to reject these trials.

**Signatures of all the members**

**(Dr P.S. Shekhawat)**
Plant Pathologist
RARI, Durgapura

**(Dr Kavita Bhadu)**
Agronomist
RARI, Durgapura

26.2.2026

**(Dr Chuni Lal)**
Pr. Scientists & PI, Barley,
ICAR-IIWBR, Karnal

**Barley Monitoring Report 2025-26**
**Zone: NWPZ**

**Period of visit: 9-11 March, 2026**

| Name of team members: | Name of the centre | Location (Longitude and Latitude) |
|---|---|---|
| Dr. Jogendra Singh,<br>Principal Scientist<br>Plant Breeder | ICAR-IIWBR, Karnal | Modipuram, Nagina, Pantnagar and Bulandshahar |
| Dr. Ravindra Kumar<br>Senior Scientist,<br>Plant Pathology | ICAR-IIWBR, Karnal | |

**Summary of breeding trials allocated & monitored:**

| Centre | Trial(s) Allotted | Trials Not Conducted / Rejected | Reason/Remark* |
|---|---|---|---|
| Modipuram | IVT-MB, AVT-MB-NWPZ, IVT-HLB, AVT-HLB-NWPZ, IVT-FB, AVT-FB-NWPZ, IVT-DP, AVT-DP-NWPZ | No | Very good |
| Pantnagar | IVT-MB, AVT-MB-NWPZ, IVT-HLB, AVT-HLB-NWPZ, IVT-FB, AVT-FB-NWPZ, IVT-DP, AVT-DP-NWPZ | No | Very good |
| Nagina | IVT-MB, AVT-MB-NWPZ, IVT-HLB, AVT-HLB-NWPZ | No | Very Good |
| Bulandshahar | IVT-MB, AVT-MB-NWPZ, IVT-HLB, AVT-HLB-NWPZ | No | Very good |

**Evaluate trials as very good, good, average and poorbased on conduction*

**Promising entries in breeding trials across centres-: (Ranking of entries to be done in the booklet)**

| Trial | Entries | Remarks |
|---|---|---|
| IVT-MB | IVT-MB-1, IVT-MB-4, IVT-MB-5, IVT-MB-10 | Promising |
| AVT-MB-NWPZ | AVT-MB-NWPZ-3, AVT-MB-NWPZ-2 | Promising |
| IVT-HLB | IVT-HLB-1, IVT-HLB-11, IVT-HLB-13, IVT-HLB-19, IVT-HLB-20, IVT-HLB-31 | Promising |
| AVT-HLB-NWPZ | AVT-HLB-NWPZ-8 | Promising |
| IVT-FB | IVT-FB-5, IVT-FB-8, IVT-FB-17 | Promising |
| AVT-FB-NWPZ | AVT-FB-NWPZ-2, AVT-FB-NWPZ-3 | Promising |
| IVT-DP | IVT-DP-5, IVT-DP-11, IVT-DP-14, IVT-DP-25 | Promising |
| AVT-DP-NWPZ | AVT-DP-NWPZ - 4 | Promising |

**Entries recommended for purification (Take photograph):**

| Trial | Entry | Remark |
|---|---|---|
| IVT-MB | IVT-MB-14, IVT-MB-21 | Up to 4 Off types plants of 6 rowed were observed in the entry |

| | | |
|---|---|---|
| | | observed in IVT-MB-21. |
| AVT-MB-NWPZ | AVT-MB-NWPZ-1 | Up to 4 Off types plants of 2-rowed (green spike) were observed in the entry AVT-MB-NWPZ-1 |
| IVT-HLB | IVT-HLB-4, IVT-HLB-7, IVT-HLB-10, IVT-HLB-22, IVT-HLB-23, IVT-HLB-30, | Off types of the 6-rowed type (IVT-HLB-4, IVT-HLB-7, IVT-HLB-10, IVT-HLB-22, IVT-HLB-23) and Off types of spike differences in IVT-HLB-30 were observed. |
| AVT-HLB-NWPZ | AVT-HLB-NWPZ-6 | Up to 4 Off type plants of 6-rowed were observed in the entry AVT-HLB-NWPZ-6. |
| IVT-FB | IVT-FB-12 | Up to 7 Off type plants of 6-rowed of different plant heights were observed in the entry IVT-FB-12. |
| AVT-FB-NWPZ | AVT-FB-NWPZ-5 | Up to 6 Off type plants of 6-rowed were observed in the entry AVT-FB-NWPZ-5. |
| IVT-DP | - | - |
| AVT-DP-NWPZ | AVT-DP-NWPZ -1 | Up to 5 Off type plants of 2-rowed were observed in the entry AVT-DP-NWPZ-1 |

**Entries recommended to be dropped from further testing:**

| Trial | Entry | Remark |
|---|---|---|
| IVT-MB | IVT-MB-8 | Less germination at all locations |
| | IVT-MB-15 | Segregation for spike colour |
| | IVT-MB-16 | Segregation for rudimentary and non-rudimentary of 2-row spikes |
| | IVT-MB-19 | Mixture of rudimentary and non-rudimentary of 2-row spikes |
| | IVT-MB-25 | Mixture of different colour spikes of 2-row. |
| IVT-HLB | IVT-HLB-6 | IVT-HLB-6 has 50: 50 mixture of plant with rudimentary and non-rudimentary spiklets and spike differences |
| IVT-FB | IVT-FB-16 | Mixture of 2 row and 6 row types plants. |

**Entries exhibiting higher diseases incidence /insect infestation/poor germination/high lodging (Take photgraph):**

| Name of trial | Disease incidence |
|---|---|
| IVT-MB | Three entries viz; IVT-MB-1 (1%), IVT-MB-6 (1%), IVT-MB-12 (2%) at Modipuram and two entries IVT-MB-20 (1%) and IVT-MB-25 (1%) at Nagina were observed incidence of covered smut whereas no incidence was observed at Pantnagar for covered smut.<br>Three testing entries of IVT-MB namely, IVT-MB-17 (47), IVT-MB-18 (36), and IVT-MB-19 (57) revealed high scores for leaf blight at Nagina while at Pantnagar centre, five malt barley entries viz; IVT-MB-1 (36), IVT-MB-6 (36), IVT-MB-16 (35), IVT-MB-1 8 (47) and IVT-MB-19 (46) were observed having double digit score (35 to 47). |
| AVT-MB | Incidences of the Covered smut were recorded from 1% to 2% in |

| | |
|---|---|
| | at Modipuram and Nagina. |
| IVT-HLB | IVT-HLB trial showed a wide range of incidence of covered smut (0.1% to 20%) at all four locations.<br>**Modipuram**: Four entries viz; IVT-HLB-36 (5%), IVT-HLB-27 (7%), IVT-HLB-3 (15%) and IVT-HLB-26 (20%) revealed high score for covered smut.<br>**Nagina**: Fifteen entries of the hulless barley showed higher incidence of covered smut from 1% to 20%. Out of these, IVT-HLB-10 (3%), IVT-HLB-25(3%), IVT-HLB-3 (5%), IVT-HLB-4 (8%), IVT-HLB-26 (10%), IVT-HLB-29 (10%), IVT-HLB-22 (15%), IVT-HLB-23 (15%) and IVT-HLB-34 (20%) showed higher score for covered smut. At this centre, three testing entries IVT-HLB-7(46), IVT-HLB-10(46) and IVT-HLB-22(58) revealed higher score for leaf blight.<br>**Pantnagar:** Three test entries showed covered smut score from 3% to 5%. The score was recorded in the entries IVT-HLB-4 (3%), IVT-HLB-34 (5%) and IVT-HLB-26 (10%). Incidence for leaf blight was observed in eight entries viz; IVT-HLB-3 (36), IVT-HLB-7 (47), IVT-HLB-9 (37), IVT-HLB-17 (57), IVT-HLB-20 (46), IVT-HLB-22 (57), IVT-HLB-29 (46) and IVT-HLB-35 (57) which revealed higher score of the leaf blight at this location.<br>**Bulandshahar:** Covered smut was noted from 1% to 15% in 7 test entries. These entries are IVT-HLB-22 (1%), IVT-HLB-26 (1%), IVT-HLB-4 (3%), IVT-HLB-5 (5%), IVT-HLB-27 (5%), IVT-HLB-26 (10%) and IVT-HLB-29 (15%). No incidence of leaf blight was observed at this location. |
| AVT-HLB | **Modipuram:** Three test entries AVT-HLB-1 (1.5%), AVT-HLB-3 (2 %), and AVT-HLB-7 (10%) showed the covered smut incidence whereas no leaf blight was observed at this centre.<br>**Nagina:** Two test entries AVT-HLB-1 (1%) and AVT-HLB-7 (2%) showed the incidence for covered smut while four entries AVT-HLB-1 (35), AVT-HLB-3 (46), AVT-HLB-4 (58) and AVT-HLB-7 (79) had higher score for leaf blight.<br>**Pantnagar:** Covered smut was recorded in one entry AVT-HLB-8 (1%), where as leaf blight was found in higher score in four entries AVT-HLB-2 (45), AVT-HLB-3 (35), AVT-HLB-4 (67) and AVT-HLB-7 (99).<br>**Bulandshahar**: No incidence was observed for covered smut in any entry while two entries AVT-HLB-2 (35) and AVT-HLB-7 (57) showed higher score for leaf blight. |
| IVT-FB | **Pantnagar:** No incidence of the covered smut was observed in IVT-FB trial. However, fifteen test entries showed higher score of the leaf blight. These entries are IVT-3 (68), IVT-5 (58), IVT-7 (89), IVT-9(58), IVT-14 (35), IVT-19 (35), IVT-20 (99), IVT-21 (68), IVT-24 (57), IVT-26 (36), IVT-27(47), IVT-29 (36), IVT-30 (68), IVT-31 (35) and IVT-34 (36). |
| AVT-FB-NWPZ | **Pantnagar:** Four test entries AVT-FB-NWPZ-2 (47), AVT-FB-NWPZ-3 (36), AVT-FB-NWPZ-4 (57) and AVT-FB-NWPZ-7 (47) revealed higher score for leaf blight. |
| IVT-DP | **Pantnagar:** Covered smut was observed in one entry IVT-DP-25 (1%) and leaf blight was found in 13 test entries viz; IVT-DP-1 (35), IVT-DP-2 (46), IVT-DP-4(46), IVT-DP-6 (46), IVT-DP-8 (89), IVT-DP-10 (57), IVT-DP-13 (35), IVT-DP-17 (46), IVT-DP-19 (47), IVT-DP-20 (57), IVT-DP-22 (99), IVT-DP-23 (47) and IVT-DP-25 (36). |
| AVT-DP-NWPZ | **Pantnagar:** Two test entries AVT-DP-NWPZ-2 (99) and AVT-DP-NWPZ-4 (47) showed the higher score for leaf blight. |

**Report on Agronomical Trials:**

| Centre | Trial(s) allotted and conducted | Remark |
|---|---|---|
| Pantnagar | Response of new malt barley genotypes to different sowing times | Trial was conducted according to technical programme and found in good condition. |

**Report on Pathological Nurseries:**

| Centre | Nursery | Remark |
|---|---|---|
| Pantnagar | IBDSN, NBDSN and EBDSN | All allocated trials were sown and conducted well.<br>IBDSN (with maximum LB 79 score in 773 no.).<br>NBDSN (with maximum LB 57 score in 202 No.).<br>EBDSN (with maximum LB 25 in 12 A no.) |
| | | |

**Take the photograph of Infector rows**

**Farmers Interaction under VKSA during monitoring: No**

| Location | Number of Farmers Interacted | Remarks |
|---|---|---|
| | | |
| | | |
| | | |

**Any other trial (Physiological trial/nucleus seed production/Nurseries)**

**Special comments, if any (2-3 bullet points only)**

- **High leaf blight score was observed at Pantnagar.**

Ravindra Kumar. 20/04/26

**(Ravindra Kumar)**

Singh 20/4/2026

**(Jogendra Singh)**

**Signatures of all the members**

# Proforma for Zonal Monitoring Report 2025-26

## Zone:NEPZ

**Period of visit: 25.02.2026-01.03.2026**

| Name of team members: | Name of the centre | Location (Longitude and Latitude) |
|---|---|---|
| 1. Dr Santosh Kumar Bishnoi, Senior Scientist, ICAR-IIWBR, RS Hisar<br>2. Dr Ravindra Kumar, Senior Scientist, ICAR-IIWBR, Karnal<br>3. Dr. Nayiar Ali, Senior Agronomist, BAU, Ranchi | BAU, Ranchi | |
| | BISA, Samastipur, | |
| | FCRS, Burdhman | |

**Summary of Breeding trials allocated& monitored:**

| Centre | Trial(s) Allotted | Trials Not Conducted / Rejected | Reason/Remark* |
|---|---|---|---|
| BAU, Ranchi | IVT-FB, AVT-FB, IVT-DPB, AVT/IVT-Rainfed, IVT-HL, AVT-HL. | Nil | All trials were planted very well; however, there was an issue of low germination and poor tillering in all the trials. It was mainly due to the new land with very low organic matter content. |
| BISA, Samastipur | IVT-FB, AVT-FB, IVT-DPB, AVT/IVT-Rainfed, IVT-HL, AVT-HL. | Nil | The expressions of all the trials were very good. The disease development i.e. leaf blight was also good. However, entries were also noticed showing very low incidence of Leaf blight, loose smut and covered smut, indicating possibility of disease resistance. |
| FCRS, Burdhman | AVT-FB, IVT-DPB, AVT/IVT-Rainfed, IVT-HL, AVT-HL | Nil | All the trials were planted timely but there was an issue of forced maturity in all the trials, therefore, the disease data could not be taken. |

***Evaluate trials as very good, good, average and poorbased on conduction*

**Photographs of the trial**

**Promising entries in breeding trials across centers-: (Ranking of entries to be done in the booklet)**

| Trial | Entries | Remarks |
|---|---|---|
| IVT-FB | IVT-FB 3, 9, 14, 15, 19, 20, 23, 29, 33, 34 and 36 | |
| IVT-HLB | IVT-HLB 1, 4, 5, 6, 7, 11, 13, 14, 16, 17, 18, 19, 20, 21, 24, 27, 28, 29, 30, 31, 32, 34 and 36 | |
| IVT-DP | IVT-DP 2, 3, 4, 8, 9, 11, 12,15, 16, 19, 21 and 22 | |
| AVT-FB | AVT-FB 3 and 5 | |
| AVT-HLB | AVT-HLB 1, 2, 4, 7 and 9 | |
| AVT/IVT-Rainfed | AVT/IVT-Rainfed 2, 4, 5, 15, and 17 | |

**Entries recommended for purification (Take photograph):**

| Trial | Entry | Remark |
|---|---|---|
| IVT-FB | IVT-FB- 12, 32, 21, 13 | Off type plants more than 10 in all four entries. |
| IVT-HLB | IVT-HLB- 10, 23, 24, 25, 33, 35, | E-10:6R Off types<br>E-23, 24, 33, 35: Lack of uniformity<br>E-25: Off types more than 10 |
| IVT-DPB | IVT-DPB- 3, 6, 18 and 24 | E-3, 6 and 24: Off types more than 10<br>E-18: Off types more than 5 |
| AVT-FB | AVT-FB- 12, 13, 21 and 32 | Off types more than 5 |
| AVT-HLB | AVT-HLB- 1 and 9 | Off types more than 3 |
| AVT/IVT-Rainfed | AVT/IVT-Rainfed- 9, 11 and 17 | E-9: Off types more than 5<br>E-11: Height difference<br>E-17: Height difference |

**Entries recommended to be dropped from further testing:**

| Trial | Entry | Remark |
|---|---|---|
| IVT-FB | IVT-FB-22 and 36 | Lack of uniformity and poor performance |
| IVT-HLB | Nil | |
| IVT-DPB | IVT-DPB-13 | Lack of uniformity and poor performance |
| AVT-FB | Nil | |
| AVT-HLB | Nil | |
| AVT/IVT-Rainfed | Nil | |

**Entries exhibiting higher diseases incidence /insect infestation/poor germination/high lodging (Take photograph):**

| Trial | Entry (s) | Remarks |
|---|---|---|
| IVT-FB | Leaf blight in IVT-FB-1, 8, 9, 10, 18, 20 and 31.<br>Covered smut in IVT-FB-1 (5%), 6 (1%)<br>Loose smut in IVT-FB-21 (1%), 24 (1%), | E-1: Leaf blight 13<br>E-8: Leaf blight 13<br>E-9: Leaf blight 35<br>E-10: Leaf blight 14<br>E-18: Leaf blight 35<br>E-20: Leaf blight 47<br>E-24: Leaf blight 13<br>E-31: Leaf blight 58 |
| IVT-HLB | Leaf blight in IVT-HLB-19<br>**Covered smut in** IVT-HLB-23 (5%), 22 (5%), 26 (20%), 29 | E:19 Leaf blight 14 |

| | | |
|---|---|---|
| | (2%), 34 (1%), 4 (4%), | |
| IVT-DPB | Leaf blight in IVT-DPB-5 (0.1%) | E-18: Leaf blight 13<br>E-6: Leaf blight 26<br>E-4: Leaf blight 13<br>E-16: Leaf blight 14<br>E-12: Leaf blight 14<br>E-10: Leaf blight 35<br>E-22: Leaf blight 26<br>E-7: Leaf blight 14<br>E-11: Leaf blight 36<br>E-13: Leaf blight 38<br>E-20: Leaf blight 34 |
| AVT-FB | Leaf blight in AVT-FB-3, 4 and 6 | E-3: Leaf blight 02<br>E-4: Leaf blight 23<br>E-6: Leaf blight 13 |
| AVT-HLB | Leaf blight in AVT-HLB-3 and 10<br>Covered smut in AVT-HLB-3 (1%)<br>Loose smut in AVT-HLB-1 (5%) | E-3: Leaf blight 12<br>E-10: Leaf blight 24 |
| AVT/IVT-Rainfed | Nil | |

**Report on Agronomical Trials:**

| Centre | Trial(s) allotted and conducted | Remark |
|---|---|---|
| BAU, Ranchi | • Response of new hull less barley genotypes to different dates and times<br>• Response of new feed barley genotypes to different sowing times<br>• Evaluation of herbicides for broad leaved weed control in barley<br>• Optimizing the sowing time and nitrogen dose in hull less barley | The trials were planted as per the recommendation, however lacked vigor mainly due to new land which was deficit in soil organic matter. |

**Report on Pathological Nurseries:**

| Centre | Nursery | Remark |
|---|---|---|
| | | |
| | | |
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|---|---|---|
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| | | |

**Take the photograph of Infector rows**

**Farmers Interaction under VKSA during monitoring**

| Location | Number of Farmers Interacted | Remarks |
|---|---|---|
| | | |
| | | |
| | | |

**Any other trial (Physiological trial/nucleus seed production/Nurseries)**

**Special comments, if any (2-3 bullet points only)**

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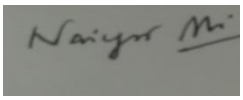
**Signatures of all the members**




**Dr. Santosh Kumar Bishnoi**
**Sr. Scientist,**
**ICAR-IIWBR, Hisar**

**Dr. Ravindra Kumar**
**Sr. Scientist,**
**ICAR-IIWBR, Hisar**

**Dr. Naiyar Ali**
**Sr. Agronomist**
**BAU, Ranchi**

## Monitoring Report of Barley for NEPZ (2025-26)

Period of visit: From 05.03.2026 to 09.03.2026

**Name of Team Members & Centers**

| Name of Team Members | Name of the Centre | Location (Longitude and Latitude) |
|---|---|---|
| Dr.Omvir Singh<br>Dr.Vijay Kr. Yadav<br>Dr. Girish Goyal<br>Dr.V.P. Chaudhary | CSA Kanpur | 80.3071, 26.4912 |
| | ANDUA & T Ayodhya | 81.837348, 26.534192 |
| | BHU Varanasi | 82.990494, 25.267878 |

**Summary of Breeding Trials Allocated & Monitored**

| Centre | Trial(s) Allotted | Trials Not Conducted / Rejected | Reason/Remark* |
|---|---|---|---|
| CSA Kanpur | IVT- Hulless Barley | - | Very Good |
| | AVT- Hulless Barley- | - | Very Good |
| | IVT-FB | | Very Good |
| | AVT-FB | - | Very Good |
| | IVT-DP | | Very Good |
| Saini Dilipnagar | IVT/AVT -SST | | Very Good |
| | IVT/AVT-RF | | Very Good |
| NDUA&T Ayodhya | IVT- Hulless Barley | - | Very Good |
| | AVT- Hulless Barley- | - | Very Good |
| | IVT-FB | | Very Good |
| | AVT-FB | | Very Good |
| | IVT/AVT-RF | | Very Good |
| | IVT/AVT -SST | | Very Good |
| | IVT-DP | | Very Good |
| BHU., VARANSI | IVT- Hulless Barley | - | Very Good |
| | AVT- Hulless Barley- | - | Very Good |
| | IVT-FB | | Very Good |
| | AVT-FB | | Very Good |
| | IVT/AVT-RF | | Very Good |
| | IVT-DP | | Very Good |

**Evaluate trials as very good, good, average and poor based on conduction*

**Promising Entries in Breeding Trials Across Centers (Ranking of entries to be done in the booklet)**

| Trial | Entries | Remarks |
|---|---|---|
| IVT-Feed Barley | NA | NA |
| AVT-Feed Barley | AVT-FB-3 | Excellent |
| IVT- Hulless Barley | IVT-HB- 10,11 35 | Very good |
| AVT- Hulless Barley | AVT-HB-5,8 | Excellent |
| IVT-Dual Purpose | IVT-DP-NA | NA |
| IVT/AVT -SST | NA | NA |
| IVT/AVT-RF | NA | NA |

**Entries Recommended for Purification (Take Photograph)**

| Trial | Entry | Remark |
|---|---|---|
| IVT-Feed Barley | IVT-FB-14 | 1plants were off type |
| AVT-Feed Barley | - | - |
| IVT- Hulless Barley | IVT-HB-24 | 2 plants were off type |
| AVT- Hulless Barley | - | - |
| IVT-Dual Purpose | IVT-DP-3,9 | 2 plants were off type |
| IVT/AVT -SST | NA | NA |
| IVT/AVT-RF | NA | NA |

**Entries Recommended to Be Dropped from Further Testing**

| Trial | Entry | Remark |
|---|---|---|
| IVT-Feed Barley | -- | -- |
| AVT-Feed Barley | - | - |
| IVT- Hulless Barley | - | - |
| AVT- Hulless Barley | - | - |
| IVT-Dual Purpose | - | - |
| IVT/AVT -SST | - | - |
| IVT/AVT-RF | - | - |

**Entries Exhibiting Higher Disease Incidence / Insect Infestation / Poor Germination / High Lodging (Take Photograph)**

| Centre | Trial (s) Allotted | Entry | Reason/Remark* |
|---|---|---|---|
| CSA Kanpur | IVT-Feed Barley | 9 | Covered smut incidence ranged from 10-20% |
| | AVT-Feed Barley | 20 | Covered smut incidence was recorded 10-20% |
| | IVT- Hulless Barley | 5 | Covered smut incidence was recorded 5-10% |
| | AVT- Hulless Barley- | 11 | Covered smut incidence was recorded 8% |
| | IVT-Dual Purpose | - | - |
| Saini | IVT/AVT -SST | - | - |

| | | | |
|---|---|---|---|
| Dilipnagar | IVT/AVT-RF | - | - |
| ANDAUT Ayodhya | IVT- Hulless Barley | 6, 8 ,17,23 | Covered smut incidence ranged from 5-20% |
| | AVT- Hulless Barley- | 4, 10, 13, | Covered smut incidence ranged from 5-10% |
| | IVT-FB | - | - |
| | AVT-FB | - | - |
| | IVT/AVT-RF | - | - |
| | IVT/AVT -SST | - | - |
| | IVT-DP | - | - |
| | | - | - |
| BHU Varansi | IVT- Hulless Barley | 3,11,17,35 | Covered smut incidence ranged from 5-10% |
| | AVT- Hulless Barley | 1,4,7,9 | Spot blotch score was higher in these entries |
| | IVT-FB | 3.5.10 | Spot blotch severity was higher in these entries |
| | AVT-FB | 5 6 8 | Spot blotch severity was higher in these entries |
| | IVT-DP | 11.17.20 | Spot blotch severity was higher in these entries |
| | IVT-Dual Purpose | 7,8 15, 11, 12, 19, 20, 25 | Spot blotch severity was higher in these entries |

**Report on Agronomical Trials**

| Centre | Trial(s) Allotted and Conducted | Remark |
|---|---|---|
| CSA Kanpur | IR-SL-LON | Very Good |
| | IR-TS-HLB-DOS | Very Good |
| | IR-TS-FB-DOS | Very Good |
| | SPL-5 | Very Good |
| ANDUAT Ayodhya | IR-SL-LON | Very Good |
| | IR-TS-HLB-DOS | Very Good |
| | IR-TS-FB-DOS | Very Good |
| | SPL-5 | Very Good |
| BHU, Varansi | IR-TS-HLB-DOS | Very Good |
| | IR-TS-FB-DOS | Very Good |

**Special Comments**

All the trials at all three locations were in a very good condition.

9.3.26

(Omvir Singh) (Vijay Kr. Yadav) (Girish Goyal) (V.P. Chaudhary)

# Monitoring Report of Barley for CZ (2025-26)

**Period of visit: From 23-2-2026 to 27- 2-20-26**

| Name of team members: | Name of the centre | Location (Longitude and Latitude) |
|---|---|---|
| Dr Lokendra Kumar<br>Dr OP Gupta<br>Dr Bhagat Singh<br>Dr Manmohan Baghel | RVSKV Gwalior | 78.197872, 26.232744 |
| | RLBCAU Jhansi | 78.551803, 25.516784 |
| | BUAT Banda | 80.332141, 25.528906 |

**Summary of Breeding trials allocated& monitored:**

| Centre | Trial(s) Allotted | Trials Not Conducted / Rejected | Reason/Remark* |
|---|---|---|---|
| RVSKV Gwalior | IVT-Feed Barley | - | Good |
| | AVT-Feed Barley-CZ | - | Good |
| | IVT- Hulless Barley | This trial is rejected due to very low plant population | |
| | AVT- Hulless Barley-CZ | - | Good |
| | IVT-Dual Purpose | - | Good |
| RLBCAU Jhansi | IVT- Hulless Barley | - | Very Good |
| | AVT- Hulless Barley-CZ | - | Very Good |
| BUAT Banda | IVT-Feed Barley | - | Very good |
| | AVT-Feed Barley-CZ | - | Very good |
| | IVT- Hulless Barley | - | Very good |
| | AVT- Hulless Barley-CZ | - | Very good |
| | IVT-Dual Purpose | - | Very good |

**Evaluate trials as very good, good, average and poorbased on conduction*

**Promising entries in breeding trialsacross centers-: (Ranking of entries to be done in the booklet)**

| Trial | Entries | Remarks |
|---|---|---|
| IVT-Feed Barley | NA | NA |
| AVT-Feed Barley-CZ | AVT-FB-3 | Excellent |
| IVT- Hulless Barley | IVT-HB-9,28,35 | Very good |
| AVT- Hulless Barley-CZ | AVT-HB-5,9 | Excellent |
| IVT-Dual Purpose | IVT-DP-7,22 | Very-2 good |

**Entries recommended for purification (Take photograph):**

| Trial | Entry | Remark |
|---|---|---|
| IVT-Feed Barley | IVT-FB-19 | 4 plants were off type |
| AVT-Feed Barley-CZ | - | - |
| IVT- Hulless Barley | IVT-HB-26 | 3 plants were off type |
| AVT- Hulless Barley-CZ | - | - |
| IVT-Dual Purpose | IVT-DP-6,15 | 2-3 plants were off type |

**Entries recommended to be dropped from further testing:**

| Trial | Entry | Remark |
|---|---|---|
| IVT-Feed Barley | IVT-FB-7, IVT-FB-22 | Mixture of tall & dwarf, waxy & nonwaxy spikes |
| AVT-Feed Barley-CZ | - | - |
| IVT- Hulless Barley | - | - |
| AVT- Hulless Barley-CZ | - | - |
| IVT-Dual Purpose | - | - |

**Entries exhibiting higher diseases incidence /insect infestation/poor germination/high lodging (Take photograph):**

| Centre | Trial(s) Allotted | Entry | Reason/Remark* |
|---|---|---|---|
| RVSKV Gwalior | IVT-Feed Barley | 9, 12, 31 | Covered smut incidence ranged from 5-20% |
| | AVT-Feed Barley-CZ | 20 | Covered smut incidence was recorded 20% |
| | IVT- Hulless Barley | 5 | Covered smut incidence was recorded 10% |
| | AVT- Hulless Barley-CZ | 11 | Covered smut incidence was recorded 8% |
| | IVT-Dual Purpose | - | - |
| RLBCAU Jhansi | IVT- Hulless Barley | 2, 4, 6, 10, 22, 23, 34, 36 | Covered smut incidence ranged from 5-50% (Note: Entry no 34, CV incidence was recorded 70%) |
| | AVT- Hulless Barley-CZ | 10, 11, 13 | Covered smut incidence ranged from 5-20% |
| BUAT Banda | IVT-Feed Barley | 3, 7, 20, 24, 29 | Spot blotch severity was higher in these entries |
| | AVT-Feed Barley-CZ | - | |
| | IVT- Hulless Barley | 4, 10, 26, 29, 34 | Covered smut incidence ranged from 10-30% |
| | AVT- Hulless Barley-CZ | 1, 3, 4, 5, 6, 11 | Spot blotch severity was higher in these entries |
| | IVT-Dual Purpose | 3, 15, 7, 8, 10, 11, 13, 19, 22, 25 | Spot blotch severity was higher in these entries |

**Report on Agronomical Trials:**

| Centre | Trial(s) allotted and conducted | Remark |
|---|---|---|
| RVSKV Gwalior | IR-TS-HLB-DOS:- Response of new hulless barley genotypes to different sowing time | The trial was conducted properly; however, poor plant stand was observed in the second date of sowing (D2) in some of the entries. |
| | SPL-5:- Evaluation of herbicides for broad-leaved weed control in barley | The trial was conducted under very good conditions, and the effect of the various treatments was clearly observed. |

**Report on Pathological Nurseries: NA**

| Centre | Nursery | Remark |
|---|---|---|
| | | |

**Farmers Interaction under VKSA during monitoring**

| Location | Number of Farmers Interacted | Remarks |
|---|---|---|
| BUAT Banda | 250 | A lectureon "Health benefits of hulless barley and its scopein Bundelkhand region" was delivered during the inaugural session of Kisan Mela at BUAT, Banda |

**Special comments, if any (2-3 bullet points only)**

- All the trials at all three locations were in a very good condition except IVT-Hulless trial at the Gwalior center. At this center, the germination of most of the entries in IVT-Hulless barley trial was extremely poor. Hence, the monitoring team rejected this trial on the basis of very poor plant stand.

**(Lokendra Kumar)** **(OP Gupta)** **(Bhagat Singh)** **(Man Mohan Baghel)**