WHEAT CROP HEALTH NEWSLETTER
(गेहूँ फसल स्वास्थ्य समाचार पत्रिका)

WHEAT CROP HEALTH NEWSLETTER
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सारांश

गेहूं और जौ की फसल की सेहत का फ़रवरी माह में आकलन करने के लिए भारतीय गेहूँ एवं जौ अनुसंधान संस्थान और समन्वित सहयोगी केंद्र के वैज्ञानिकों ने गेहूं और जौ उगाने वाले क्षेत्रों के सर्वेक्षण किए। कुल मिलाकर फसल स्वास्थ्य उत्कृष्ट बना हुआ है जिसमें कोई प्रमुख बीमारी और कीट का प्रकोप नहीं देखा गया। सर्वेक्षण और निगरानी के दौरान, पंजाब में पीला रतुआ SAARC ट्रैप नर्सरियों में देखा गया। किसानों के खेतों में पीला रतुआ गांव नंगल इशर (होशियारपुर) में किस्म श्रीराम 272 और गांव सैंचा (होशियारपुर) में किस्म PBW 550 पर पाया गया, लेकिन इसे समय पर फफूंदनाशक के माध्यम से प्रभावी ढंग से प्रबंधित किया गया। उत्तर प्रदेश में भूरा रतुआ के मामले रिपोर्ट किए गए, जबकि चैपा संक्रमण जौ की फसलों में देखा गया। उत्तराखंड में चूर्णिल असिता रोग के लक्षण दर्ज की गई, और मध्य प्रदेश में पुराने गेहूं की किस्मों (GW273, MP3336, GW322, HI1544) और निजी कंपनियाँ की किस्मों (श्रीराम 111, श्रीराम 303) में भूरे रतुआ के लक्षण पाए गए । राजस्थान में गेहूँ रतुआ बीमारियों से मुक्त रहा लेकिन खुली कांगियारी, दीमक, और सूत्रकृमि संक्रमण भी देखा गया। गुजरात में भूरा रतुआ किसानों के खेतों में देखा गया, जबकि बिहार में गेहूँ रतुआ बीमारियों के संक्रमण से मुक्त रहा तथा पर्ण झुलसा रोग के लक्षण गेहूं और जौ की फसल में पाए गए। पश्चिम बंगाल में गेहूं की फसल में प्रमुख रोग का प्रकोप नहीं देखा गया, हालांकि पर्ण झुलसा रोग, खुली कांगियारी और तना छिद्रक के लक्षण के लक्षण गेहूं की फसल में पाए गए । महाराष्ट्र और कर्नाटक में गेहूँ रतुआ, फ्यूजेरियम बाली सड़न और धब्बेदार रोग के लक्षण पाए गए। किसानों से आग्रह है कि वे रतुआ रोगों के प्रति सतर्क रहें, शुरुआती लक्षणों के लिए नियमित रूप से फसलों की निगरानी करें और रतुआ का पता चलने पर प्रोपिकोनाज़ोल (0.1%) या टेबुकोनाज़ोल 50% + ट्राइफ्लोक्सीस्ट्रोबिन 25% WG (0.06%) का छिड़काव करें। इसके अतिरिक्त, गेहूं की फसलों पर चैपा संक्रमण की निगरानी की जानी चाहिए। यदि चैपा (aphid) की संख्या प्रति बाली 10-15 से अधिक है, तो प्रभावी नियंत्रण के लिए प्रति हेक्टेयर 500 लीटर पानी में क्विनालफोस 25% EC के 1000 मिली का छिड़काव करने की सलाह दी जाती है। कुल मिलाकर फ़रवरी माह में फसल की सेहत बहुत अच्छी है और इस मौसम में अच्छी पैदावार की उम्मीद है।

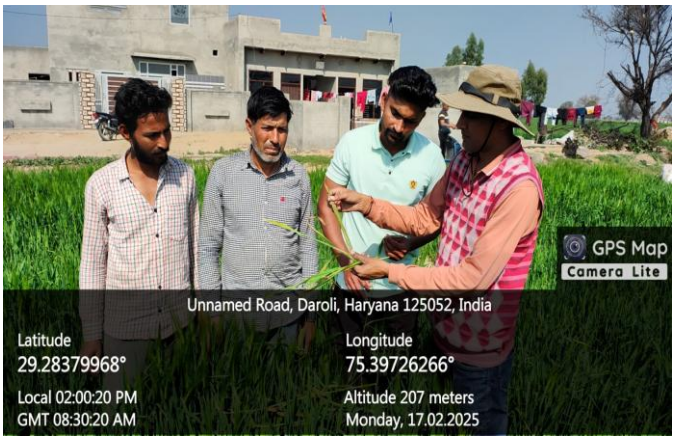
Summary

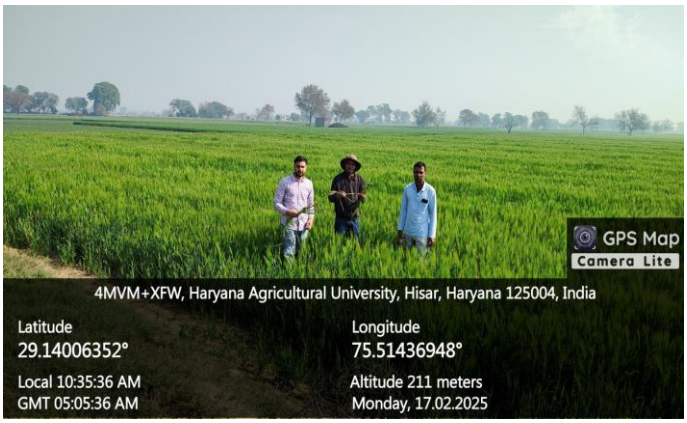
Scientists from the ICAR-Indian Institute of Wheat and Barley Research (ICAR-IIWBR) and AICRP collaborating centers conducted surveys to assess wheat crop health across major wheat and barley growing regions. The findings indicate that overall crop health remains excellent, with no significant biotic threats. However, localized instances of disease and pest infestations were observed. In Punjab, stripe rust was detected in SAARC trap nurseries and as well as in farmers' fields, but was effectively managed through timely fungicide applications. Uttar Pradesh reported cases of brown rust, while aphid infestations affected barley crops. Uttarakhand recorded incidences of powdery mildew, and Madhya Pradesh observed brown rust in older wheat varieties. Rajasthan remained free of rust diseases but reported loose smut, termite damage, and cereal cyst nematode infestations. In Gujarat, brown rust was identified in two farmers' fields, while Bihar recorded moderate leaf blight without any rust symptoms. West Bengal saw no major disease outbreaks, though spot blotch, loose smut, and stem borer infestations were noted. Maharashtra reported localized occurrences of leaf rust, Fusarium head blight, and spot blotch, with varying severity. In Karnataka, wheat crops were affected by leaf rust, leaf blight, and Fusarium head blight, along with insect infestations such as aphids, stem borers, and leaf folders. Farmers are urged to stay vigilant for rust diseases, regularly monitor crops for early signs of stripe rust (yellow rust), brown rust, or black rust, and apply Propiconazole (0.1%) or Tebuconazole 50% + Trifloxystrobin 25% WG (0.06%) if rust is detected. Additionally, wheat crops should be monitored for leaf aphid infestations. If aphid numbers exceed the economic threshold level (ETL) of 10–15 aphids per tiller, a spray of 1000 ml of Quinalphos 25% EC mixed with 500 liters of water per hectare is recommended for effective control. Overall, crop health is excellent, and a good yield is expected for the season.

Wheat crop health was monitored by scientists from coordinated centers through surveys. Additionally, information technology was employed to assess crop conditions, collecting data by contacting farmers and other stakeholders via mobile phones and WhatsApp. Overall, the crop health is excellent, with no significant damage observed due to diseases or insect infestations. The state-wise detailed report is as follows:

Haryana

On dated 17.02.2025, a survey was conducted for focusing of the yellow rust disease of wheat crop by Dr. Pawan Kasniya, Assistant Scientist (Plant Pathology), CCS HAU, Hisar. The wheat fields were surveyed of villages Ralwas, Kharia, Kabrel, Mohabatpur, Daroli, Biran, Gurshal, Chaudhariwali, Bandaheri, Balsamand (Hisar district). There was no incidence of yellow rust recorded. Keeping in view the prevailing congenial conditions for yellow rust, the farmer advised to keep vigilant the crop regularly.





Punjab

During regular surveys conducted by Dr. Jaspal Kaur of PAU Ludhiana and scientists from the KVKs in the sub-mountainous districts of Punjab, stripe rust was observed on PBW 343, which was sown alongside the SAARC Trap nurseries at KVK Langroya (SBS Nagar) and a farmer's field in Adampur (Jalandhar). A minor incidence of stripe rust was also detected on 16.2.2025 in village Nangal Ishar (Hoshiarpur) on variety Shriram 272 and in village Saincha (Hoshiarpur) on variety PBW 550. In Gurdaspur district, the disease was observed on 27.2.2025 in villages Kotli and Kallu Sohal (Block Kahnuwan). All infected fields, except for the trap nursery at Langroya, were treated with recommended fungicides to prevent further spread of the disease.

Himachal Pradesh

Surveillance for yellow rust and insect pest management in wheat was conducted on February 7, 2025, by the District Level Diagnostic Team in the Development Block Indora, District Kangra, H.P. The team surveyed approximately 38 hectares across Chanour, Bai, Indorian, MandMiani, Milwan, Kathgarh, Ullehrian, and the Seed Multiplication Farm. The team comprised Dr. Vishakha Paul, DPD, ATMA; Dr. Anju Sharma, AEO, State Bio Control Laboratory; Dr. Shilpa Chauhan, AEO, State Bio Control Laboratory, Palampur; Dr. Bodh Raj, Subject Matter Specialist, Dev. Block Indora; and Dr. Aman Kaul, ADO, Dev. Block Indora. At the time of the survey, the wheat crop was at the jointing stage, having been sown in the first and second fortnight of November 2024. The varieties planted were DBW-303 and DBW-222. No symptoms of yellow rust were observed in the surveyed areas. Given the favorable conditions for disease development, farmers were advised to monitor for any signs of the disease and to spray the crop with the recommended fungicide, Propiconazole @ 1ml/liter of water. The crop was between 85 and 90 days after sowing. Aphid incidence was reported at about 1% in some locations. Overall, the crop was in good condition in both irrigated and rainfed areas of the block. Considering the recurring occurrence of yellow rust, farmers were also informed about the importance of planting resistant wheat varieties or replacing varieties to reduce the need for frequent fungicide applications.

Jammu & Kashmir

No report received

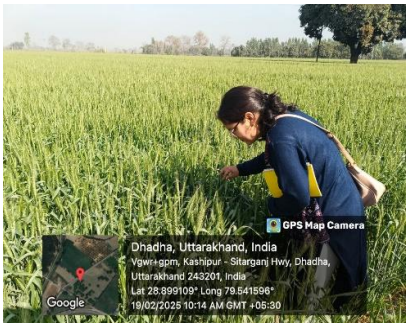
Uttar Pradesh

Dr. Vijay Kumar C.S. from Azad University of Agriculture & Technology, Kanpur, reported that the condition of wheat and barley crops was favorable. Aphid infestation was noted during the first week of February 2025, with 50-60 aphids per plant in barley crops, though no infestation was observed in wheat crops. Brown rust disease was observed in infected fields, and initial signs of leaf blight disease were noted in some fields.

Uttarakhand

A wheat rust survey was conducted by Dr. Deepshikha, SRO, on March 19, 2025, across the Tarai/Plains region of Uttarakhand. The areas visited included Makhwara Farm, Sundarnagar, Kichha, Dhadha, Barkoli Rang, Sahadaura, Kanthgri, Baghora, Nanakmatta, Mohammadganj, Firojpur, Sisariya, Nanakmatta, Paheniya, Sara Sariya, Sirsa Farm, Jungle Jogidher, Sitarganj, Pachpera, Kuwan Khera, and Khatima. The wheat crop, which was grown on normal sowing time,

was in the heading to flowering stage. The survey found that the wheat was in good health and free from yellow rust and insect pests. However, some fields showed an incidence of powdery mildew. During interactions with the farmers, information on identifying and managing wheat diseases was provided, and they were advised to remain vigilant for any disease appearance.



Madhya Pradesh

The survey was conducted during the last week of February, 2025. This extensive end-of-season survey was carried out by me, Dr. K. K. Mishra. The survey covered nearly all major wheat-growing districts in Madhya Pradesh and parts of the Lalitpur district in Uttar Pradesh. The district-wise observations are summarized below:

Table 1: The district-wise crop health status of surveyed fields

District	Total area covered	Disease status
Narmadapuram	Surveyed 5 Tehsils and 40 villages.	No black rust observed. Brown rust was found everywhere but only on old varieties (Lok-1, local tall mixture) and private company varieties such as Sriram 111, Sriram 303, etc.
Harda	Surveyed 3 Tehsils and 20 villages.	No black rust observed. Brown rust was found everywhere, but only on local tall mixture plants
Sehore	Surveyed 3 Tehsils and 16 villages	No black rust observed. Brown rust was found everywhere but only on C-306, Lok-1, and local tall mixture plants.
Raisen	Surveyed 3 Tehsils and 14 villages.	Brown rust was observed only on C-306, Lok-1, and local tall mixture plants.
Bhopal	Surveyed 2 Tehsils and 6 villages.	No black rust observed. Brown rust was present but only on local tall mixture plants.

Vidisha	Surveyed 2 Tehsils around Salamatjang, Gyarspurganjbasoda, and Tewara	No black or brown rust observed on C-306, HI 1531, or local tall mixture plants.
Lalitpur	Surveyed 1 Tehsil and 4 villages	No black rust observed. Brown rust was found on GW322 and local tall mixture plants.
Tikamgarh	Surveyed 2 Tehsils (Baldevgarh and Ratangarhi) and 6 locations.	No black rust observed. Brown rust was found on C-306, Lok-1, and local tall mixture plants.
Chhattarpur	Surveyed 2 Tehsils and 10 locations	No black or brown rust observed on C-306, GW322, and HI 1531.
Panna	Surveyed 1 Tehsil and 6 locations	No black or brown rust observed due to crop senescence.
Satna	Surveyed 2 Tehsils and 8 locations	No black or brown rust observed on C-306 and local tall mixture plants.
Rewa	Surveyed 2 Tehsils and 12 locations	No black or brown rust observed on C-306, GW273, MP3020, or local tall mixture plants.
Sidhi	Surveyed 2 Tehsils and 12 locations	No black or brown rust observed on C-306, GW273, local tall mixture, or private company materials.
Singrauli	Surveyed 1 Tehsil and 10 locations.	No black or brown rust observed on GW273, GW322, HI 1544, local tall mixture, or private company materials.
Jabalpur	Surveyed 2 Tehsils and 10 village locations	No black or brown rust observed on GW273, MP3336, GW322, HI1544, local tall mixture, or private company materials.
Narsinghpur	Surveyed 2 Tehsils and 6 locations	No black or brown rust observed on GW273, MP3336, GW322, or private company materials.

Overall, the crop condition was very good. In most areas, the crop was in the milking to dough stage, while in parts of Harda, Khurai, Chhattarpur, Sagar, and Betul, the crop was nearly mature. Recent varieties such as MP 1323, MP 3382, MP 1203, HI 8759, HI 1650, HI 1636, HI 1634, HI 1605, MPO

1215, DBW 303, DBW 327, and DBW 187 were found to be resistant to rusts. This indicates that while brown rust inoculum from a few races was present, the adoption of newer varieties in major areas prevented any epidemic outbreaks.

Rajasthan

Dr. P.S. Shekhawat and his team from RARI, Durgapura conducted the first survey on February 14, 2025 across several villages in Jaipur district, including Govindpura, Kalwar, Hingoniya, Pachkodiya, Bobas, Begus, and Bagru. No rust was observed in either wheat or barley crops in the surveyed areas. The only notable finding was a trace incidence of loose smut in some wheat fields, with the overall crop remaining healthy. Mild infestations of Termite and CCN were noted in a few locations. In barley, trace occurrences of leaf stripe, loose smut, covered smut, and bacterial streak diseases were recorded. The second survey, conducted in collaboration with the LCIPMC team from Sri Ganganagar on February 18th, covered the Kainchiya & Ayalki (Pilibanga), Bhgwangarh, Manaksar & Amarpura (Surtgarh), Moga, 6GB & Ramana Chak (Vijaya Nagar), Mammar Kheda, Lalgarh Jattan, and Banwali (Sadulshar) areas of districts Sri Ganganagar and Hanumangarh. Similar to the first survey, no rust was observed, though a trace incidence of loose smut was noted in some wheat fields. In barley, loose smut, covered smut, and leaf stripe diseases appeared in some fields. The third survey, conducted jointly with the LCIPMC team from Sri Ganganagar by Dr. M.A. Khan on February 19th, focused on the Lawan tehsil areas of Dausa district. While yellow rust was absent, heavy incidence of leaf rust (20S-80S) was observed in some fields at Kotta Patti and Khera Ki Dhani villages. The fourth survey, again conducted with the LCIPMC team from Sri Ganganagar on February 22nd, covered the areas of Kesarisinghpura, Sri Karanpur, Gajsinghpur, 40Ps, 79GB, 8LPM-b, Sukhchainpura, Bajuwala, Vijaynagar, and Jaisar in Sri Ganganagar district. No rust was observed except for a yellow rust occurrence in a field at Bajuwala village on wheat variety HD 2851, with a 10S-40S severity. Trace incidences of loose smut, covered smut, and leaf stripe were also noted in some barley fields. Overall, the wheat and barley crops in all surveyed areas were found to be healthy.

Gujarat

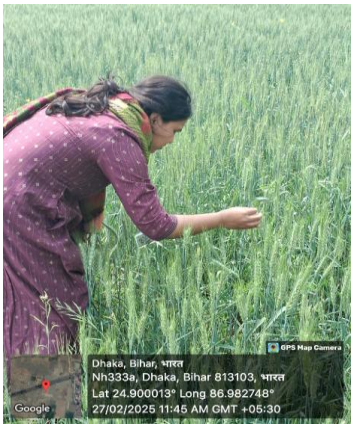
Dr. R. V. Thakkar Asstt. Res. Sci.(Pl. Path) and Dr. A. M. Patel, Research Scientist (Wheat) visited Unjha and Vijapur taluka in Mahesana district on 25th and 27th Feb 2025.Brown rust is observed in two farmer's field. Entire field was covered due to brown rust in both farmer's field. Both the farmers sawn private company seed. Samples are collected and sent it to Regional Station ICAR-IIWBR, Flowerdale, Shimla for race analysis and suitable control measures suggested to the farmers. Crop condition is overall good in surveyed area.

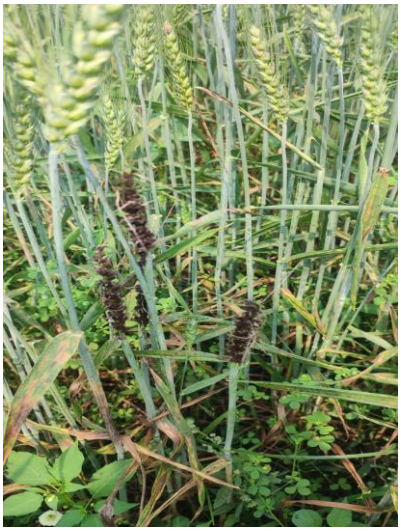
Bihar

A field visit was conducted under the AICRP Wheat and Barley program, BAU Sabour **o**n 24th and 28th February 2025**,** covering the wheat-growing districts of Munger, Banka, Bhagalpur, Shekhpura, Lakhisarai, and Jamuiin Bihar. The visit was undertaken by Dr. Deepak Baranwal, Dr. Seema Prajapati, and Dr. Shraddha Sawantto assess the crop health**,** disease incidence, and interact with local farmers regarding their cultivation practices. During the visit**,** moderate incidence of leaf blight was observed in several fields, while no symptoms of rust were recorded. Farmers shared insights into their crop management strategies, disease observations, and agronomic practices. The team provided recommendations on disease management strategies, monitoring crop health, and adopting good agricultural practices to mitigate potential disease outbreaks. The visit concluded successfully, with valuable discussions held with farmers.

West Bengal

A joint survey was conducted on February 19, 2025, by Dr. Ragunath Mandal (BCKV, Kalyani Centre, West Bengal) along with N. Anita Devi, Gautam Das, and Moumita Chakraborty (RCIPMC, Kolkata) to assess the pest and disease situation in wheat crops, with a special focus on wheat blast. The survey covered wheat-growing areas in the Nadia district (Karimpur-I and II blocks) and the Murshidabad district (Domkal block). At the time of the survey, the wheat crop was observed in various growth stages, ranging from heading to ripening. Farmer interactions revealed that most growers in the surveyed areas had procured seeds from Sri Ram Seed Pvt. Ltd. but were unaware of the exact variety name. Information obtained from the Assistant Director of Agriculture, Karimpur-I block, indicated a significant increase in wheat cultivation, with the area expanding from approximately 2,000 hectares in the previous season to 3,300 hectares in the current season. No major outbreaks of pests or diseases were recorded during the survey. However, spot blotch and loose smut were detected in some fields, along with an infestation of stem borers.





Maharashtra

A survey was conducted by Dr Sudhir Navathe, Ari, Pune in the farmers' fields viz., Pune, Satara, Ahilyanagar, Ch Sambhaji Nagar, and Jalna districts were visited in the 2nd, 3rd and 4th week of February 2025. Infestation of leaf aphids, spot blotch (severity 57-77 on the DD scale), and leaf rust (severity 20S to 40S) has been observed on-off types and varieties from private companies. In a few fields, infestation of Fusarium head blight was found. A farmer from Dharashiv (Usmanabad), Maharashtra, reported severe infestation of Fusarium head blight on the dicoccum wheat MCAS 2971 and aestivum wheat variety from a private company. The farmers' fields in the Pune, Satara and Sangli districts were visited on the 1st and 2nd of February 2025. Infestation of leaf aphids, spot blotch (severity 57-77 on DD scale), leaf rust (severity 20S to 40S) and stem rust (20S to 60S) have been observed on-off types and varieties from private companies. In a few fields, infestation of Fusarium head blight was found. In the wheat trap plot nursery planted at ARI, Pune, leaf rust was observed on genotypes Agra local, Lal Bahadur, HD 2189, MACS 2496, Bijaga Yellow and Kharchiya mutant. The samples are sent to IIWBR-RS Shimla for race analysis. A joint survey with the Central Integrated Pest Management Centre (CIPMC), Nashik, was conducted on 24th Feb in Ahilyanagar, Ch Sambhaji Nagar, Jalna districts. Leaf rust (severity 40S to 60S was recorded on varieties Mukut (Mahyco), Ajit 102, and Ajit 426. In a few plots, Fusarium head blight infestation was observed**.**

Normal sown wheat crop was in heading stage whereas, late sown wheat crop was in tillering stage. Incidence of leaf observed in farmers field on local and improved varieties upto 5S to 10S at Dhule and Jalgaon districts. Also leaf rust was observed upto 40S on Pacifica 9294 wheat variety at Nashik district whereas stem rust was not observed. The survey of wheat crop was conducted in the month of February 2025 by Dr. M. A. Sushir, Junior Wheat Pathologist, Dr. V. M. Sali, Junior Plant Pathologist, RWRRS, Mahabaleshwar.

Table 2: Survey report of wheat in Mahabaleshwar and adjoining area with crop growth situation

Date of Survey	**Name of Village**	**Crop Stage**	**Disease Symptoms**	**Pest infestation**
11/02/2025	Dhule and Jalgaon district	heading stage	Leaf rust was observed up to 5S to 10S in farmers field on local and improved varieties	Aphids infestation 5 to 10 %
17/02/2025	Viilage Wathar of Kolhapur district	heading stage	Leaf rust was observed up to 5S to 10S in farmers field on offtypes only.	Aphids infestation 5 %
18/02/2025	Village Takali of Nashik district	heading stage	leaf rust was observed upto 40S on Pacifica 9294 wheat variety	--

At ARI Niphad, a roving survey was conducted on February 21st by Mr. B. M. Mhaske, Dr. N. M. Magar, and Dr. B. D. Malunjkar to assess crop health across villages in Nashik, Pune, and Ahilyanagar districts, including Sinnar, Nandur-Shingote, Sangamner, Alefata, Narayangaon, Rajgurunagar, Shikrapur, Shirur, Shendi, and Wambori. Favorable climatic conditions prevailed throughout the month, supporting wheat crop growth. Maximum temperatures ranged from 29.5 to 34°C, while minimum temperatures varied between 7.2 and 14.2°C, with no unusual rainfall or hailstorms recorded. Survey findings revealed the widespread presence of leaf rust, with severity levels ranging from 20 to 40S. Stem rust (MS type) was observed on older varieties such as Lok-1 and Kalyansona, as well as on certain private varieties and off-type mixtures. The affected plots were at the soft dough to maturity stages. Leaf blight incidence was minimal, while aphid infestation ranged from low to moderate. Stem borer infestation was observed at a rate of 2 to 4%, and suitable control measures were recommended to farmers. Shoot fly infestation was detected in some late-sown plots, though at very low levels. Overall, both timely and late-sown wheat crops were in good condition across the surveyed areas. Additionally, the Wheat Disease Monitoring Nursery at Pimpalgaon Baswant remained free from leaf and stem rust.


Karnataka

A team of scientists from the Dharwad center, including Dr. Gurudatt Hegde, Dr. Kumar Lamani, Dr. Suma Biradar, Dr. Uday Reddy, Mr. Sudhakar Kulkarni, and Dr. Boranayak, conducted a survey in February 2025. During this period, temperatures ranged from a minimum of 20°C to a maximum of 33°C. A total of five surveys were carried out to monitor wheat diseases and pests across the Dharwad, Bagalkote, and Belgaum districts, with the crop at the maturity stage. In Benakatti village, Belgaum district, leaf rust incidence in farmers' fields reached up to 80S in bread wheat.

Leaf blight (spot blotch) was observed at an incidence of up to 34%, while Fusarium Head Blight (FHB) was recorded at 10–15% in early-sown wheat. Insect infestations, including aphids, stem borers, and leaf folders, were recorded at 1–3%. For late-sown crops, farmers were advised to apply fungicides such as Propiconazole at 0.1% or a combination product containing Tebuconazole 50% + Trifloxystrobin 25% WG at 0.06% to manage disease outbreaks. Additionally, the monitoring team (PZI), comprising Dr. Sindhu Sareen, Dr. Pradeep Sharma, Dr. Yashavant, Dr. Kumar D. Lamani, and Dr. Suma Biradar, visited farmers' fields in Byahatti village, Hubballi taluk. They observed severe leaf rust in local wheat genotypes, while the resistant genotype UAS 304 showed better tolerance.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