

WHEAT CROP HEALTH NEWSLETTER

गेहूँ फसल स्वास्थ्य समाचार पत्रिका

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सारांश

मार्च महीने में भारत के प्रमुख गेहूँ उत्पादक क्षेत्रों में किए गए गेहूँ फसल स्वास्थ्य सर्वेक्षण से पता चला कि कुछ प्रांतीय बीमारियों के साथ फसल की स्थिति सामान्य रूप से सकारात्मक है। हरियाणा में, विभिन्न स्थानों पर पीला रतुआ और भूरा रतुआ देखा गया, साथ ही इंद्री में चूर्णिल असिता रोग के लक्षण भी देखा गया। पत्ती झुलसा का प्रकोप खेतों में देखा गया, जबकि रसीना और पट्टी अफगान जैसे क्षेत्रों में भूरा रतुआ और चूर्णिल असिता बीमारियाँ दर्ज की गईं। बुबका में 'श्रीराम' गेहूँ किस्म में इन बीमारियों का प्रकोप अधिक था। उत्तर प्रदेश और उत्तराखंड ने गेहूँ और जौ की फसल की अच्छी स्थिति की सूचना दी, हालाँकि कुछ दीमक और शूट फ्लाई संक्रमण देखे गए। बिहार में मध्यम पत्ती झुलसा का प्रकोप देखा गया, लेकिन कोई रतुआ नहीं देखा गया, जबकि पश्चिम बंगाल में पत्ती झुलसा और फ्यूजेरियम हेड ब्लाइट जैसी मामूली बीमारियों के प्रकोप की सूचना दी गई। महाराष्ट्र में पत्ती झुलसा और तना छेदक का प्रकोप देखा गया, लेकिन काला रतुआ नहीं देखा गया। कुल मिलाकर, सर्वेक्षण से संकेत मिलता है कि देश भर में गेहूँ की फसलें अच्छी स्थिति में हैं, बीमारी से संबंधित नुकसान न्यूनतम है, और यहाँ तक कि देर से बोई गई गेहूँ की फसलें भी उत्कृष्ट स्थिति में हैं।

Summary

The wheat crop health survey conducted in March month across major wheat-growing regions of India revealed generally positive crop conditions with some localized disease occurrences. In Haryana, yellow rust and leaf rust were observed in various locations, with powdery mildew also noted in Indri. The incidence of leaf blight varied across fields, while other diseases such as brown rust and powdery mildew were recorded in regions like Rasina and Patti Afgan. The 'Shriram' wheat variety in Bubka exhibited a higher incidence of these diseases. Uttar Pradesh and Uttarakhand reported good wheat and barley crop conditions; though some termite and shoot fly infestations were noted. Bihar experienced moderate leaf blight incidence but no rust, while West Bengal reported minor disease occurrences like leaf blight and Fusarium head blight. Maharashtra experienced leaf rust and stem borer infestations but no stem rust. Overall, the survey indicates that wheat crops across the country are in good health, with minimal disease-related losses, and even late-sown wheat crops showed excellent conditions.

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

A wheat crop health survey was conducted by Dr. Rajender Singh on March 24- 25, 2025. During this survey, Dr. Singh visited multiple farmers' fields to assess the prevalence of wheat diseases. On March 24, 2025 significant incidences of yellow rust (YR) and leaf rust (LR) were observed across locations

like Hansi, Shekhupur, and Kangan Kheri (YR = 10S, LR = 10S), while Gulkani showed a higher yellow rust severity (YR = 40S) along with the presence of powdery mildew (PM = 02). Similar patterns were recorded in other areas such as Kandela, Amaheri, and Nagura, with YR and LR severity generally ranging from 10S to 20S. On

March 25, 2025 the survey continued in areas like Indri, where YR was recorded at 20S, and Indri Badhera, showing both YR and LR at 20S along with mild powdery mildew. In Budheri and Jatheri (Bilaspur), higher severities of LR (up to 30S) and consistent PM presence were noted. Meanwhile, in locations like Barara, Shahbad, Pehowa, and Hisar, yellow rust was absent, but leaf rust with 20S severity was common. Additionally, leaf blight incidence was found to vary between 2% and 35% across the surveyed fields

On March 27, 2025, a survey focusing on wheat crop diseases was conducted by Dr. Pawan Kasniya, Assistant Scientist (Plant Pathology), CCS HAU, Hisar. The survey covered wheat fields in the villages of Rasina, Patti Afgan, Sirta (Kaithal), Bubka, Bhagumajra (Yamunanagar), and Nahawani (Ambala). Brown rust and powdery mildew diseases were recorded during the survey. A higher incidence and severity were observed particularly in the wheat variety 'Shriram' at Bubka village.

Punjab

The regular surveys were conducted by the wheat scientists of PAU and extension personnels from KVKs and FASCs of PAU. The incidence of stripe rust and leaf rusts was observed in some of the



fields on the susceptible varieties in almost all the districts of Punjab. Some of the fields in Ropar, SBS Nagar, Gurdaspur, Ludhiana, Hoshiarpur were affected with powdery mildew (severity ranged from 4-9). The farmers of the respective fields were advised to spray their fields with recommended fungicides for the respective diseases. The rusts infected samples were collected and have been sent to for race analysis to ICAR-IIWBR Regional Station Shimla.

Himachal Pradesh

No report received

Jammu & Kashmir

No report received

Uttar Pradesh

A wheat crop health survey was conducted by Vijay Kumar Yadav, Professor and Senior Wheat Breeder at C.S. Azad University of Agriculture. He reported that the overall condition of wheat and barley crops in the area was generally good. Termite infestation in rainfed crops ranged between 10–14%, while in irrigated crops, it was about 8%. No aphid infestation was observed in wheat; however, barley crops were found to be susceptible to highly susceptible to aphid attacks. In both timely and late-sown wheat, shoot fly infestation was recorded at 10–15%. No mite infestation was observed. The first incidence of brown rust was reported on 25.02.2025 at Kharachia in Araul.

Uttarakhand

A field survey was conducted on 04.03.2025 by Dr. Navin Chander Gahtyari and Dr. Devender Sharma, Scientists from the Crop Improvement Division, ICAR-VPKAS, Almora. The survey covered wheat-growing regions of Jhankat, Naukulia, and nearby areas in Sitarganj, District Udham Singh Nagar, where the wheat crop was at the early milking stage. In Village Jhankat (28°56'45.49164" N, 79°47'5.70444" E), approximately 9.8 hectares were planted with VL Gehun 2028, VL Gehun 967, VL Gehun 953, and VL Gehun 2014. The crop was at



the milking stage, and no symptoms of yellow or brown rust were observed. Adjacent fields planted with other popular varieties such as HD 2967 were also found free from rust. In Village Naukulia (28°58'51.33684" N, 79°42'10.2444" E), around 14.0 hectares were under cultivation with VL Gehun 2028, VL Gehun 967, VL Gehun 953, VL Cookies, and VL Gehun 2014, all at the milking stage, with no yellow or brown rust symptoms recorded. Similarly, neighboring fields with other commonly grown varieties also remained free from rust infections. A few isolated off-type plants (single or very few) in Naukulia exhibited yellow rust symptoms with a disease severity score of 20S; however, the prevalent wheat varieties remained unaffected by both yellow and brown rust.

Madhya Pradesh

No report received

Rajasthan

No report received

Gujarat

Dr. R. V. Thakkar Asstt. Res. Sci. (Pl. Path) Surveyed in Vadanagar Tehsil in Mahesana district on 7th March 2025. Brown rust was observed in farmer's field in some off-type plant. Overall crop condition was good in all surveyed areas. Samples of brown rust infected plant are collected and sent it to Regional Station ICAR-IIWBR, Flowerdale, Shimla for race analysis.



Bihar

A field visit was conducted as part of the AICRP Wheat and Barley program at BAU Sabour on February 24 and 28, 2025. The visit covered the wheat-growing districts of Munger, Banka, Bhagalpur, Shekhpura, Lakhisarai, and Jamui in Bihar.

Dr. Deepak Baranwal, Dr. Seema Prajapati, and Dr. Shraddha Sawant led the visit to assess crop health, disease incidence, and engage with local farmers about their cultivation practices. During the visit, a moderate incidence of



leaf blight was observed in several fields, though no signs of rust were detected. Farmers shared their crop management strategies, disease observations, and agronomic practices. The team offered recommendations on disease management, monitoring crop health, and adopting best agricultural practices to prevent potential disease outbreaks. The visit was successfully concluded, with meaningful discussions held with farmers.

West Bengal

To assess the health of wheat crops in several northern districts of West Bengal and areas along the Indo-Bangladesh border, a team led by Dr. S. Hembram (Pathologist) and Dr. Wasim Reza (Entomologist) from the AICW&BIP, Cooch Behar Centre, conducted comprehensive surveys on March 3-4, 2025. The findings indicated overall excellent crop health, though minor disease occurrences were noted in some farmer fields. Specifically, fields in the Uttar Dinajpur and Malda districts exhibited instances of leaf blight (up to 56 on the double-digit scale) and Fusarium head blight (FHB) in certain local wheat varieties. Despite these issues, the crop stand for the season remained excellent. A follow-up survey was conducted on March 19-20, 2025, in the districts of Cooch Behar, Jalpaiguri, and Darjeeling. During this survey, brown rust, head blight, and leaf blight diseases were observed. The overall growth of the wheat crops was satisfactory, with local farmers cultivating varieties such as DBW 187 and HD 2967. In areas like Islampur, Chopra, Kharibari, and

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Cooch Behar, reports indicated incidences of leaf blight (up to 67 on the double-digit scale), brown rust, Fusarium head blight, and loose smut in some varieties. Additionally, pest infestations—primarily aphids and stemborers—were recorded in specific regions of Kharibari Block, Chopra Block (Islampur Subdivision), and Pundibari and Mathabhanga blocks in Cooch Behar district. Notably, no instances of wheat blast were reported in any of the surveyed districts. Overall, the crop health was excellent, with the majority of the wheat crops nearing the ripening stage. However, severe leaf blight incidence (up to 89 on the double-digit scale) was observed on certain barley and wheat germplasm in Pundibari, Cooch Behar. The majority of crops were at the booting stage, with some varieties already reaching early ripening.

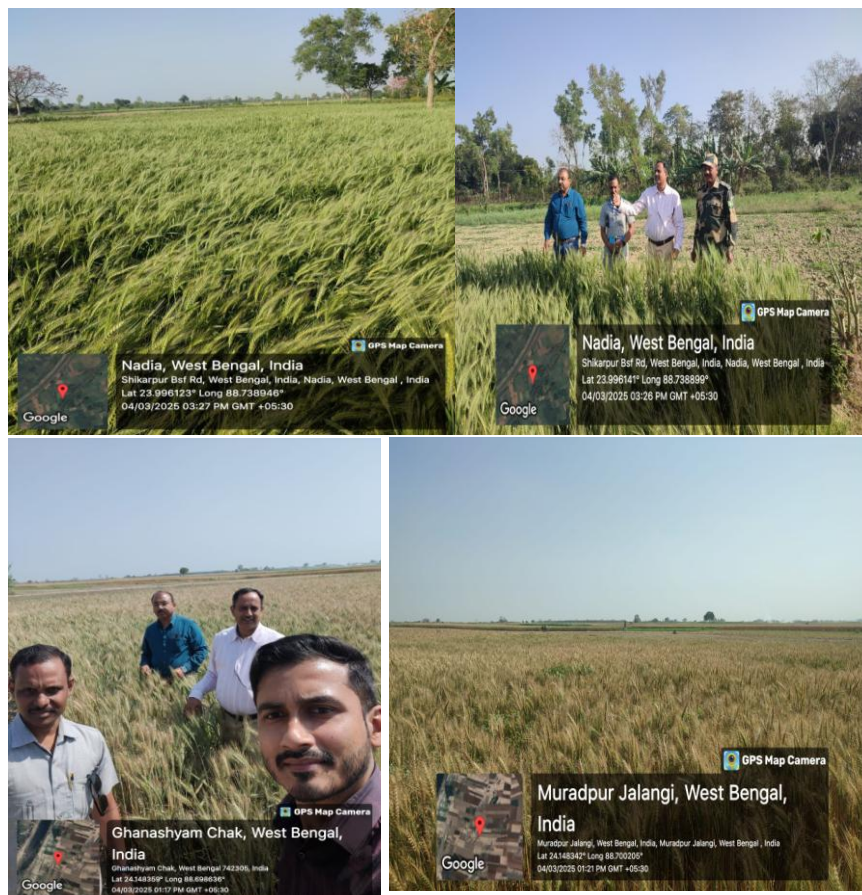


Different symptoms of leaf blight, rust and smut infection and insect infestation on wheat



View of different wheat fields covered during revoking the survey programme

On March 4, 2025, an extensive survey was conducted across the wheat-growing regions of Murshidabad (Jalangi block) and Nadia (Karimpur-I and II blocks) districts to assess the general pest and disease situation in wheat crops, with a particular focus on wheat blast disease. The survey team consisted of Dr. Anil Khippal, Principal Scientist at the Resource Management Division, IIWBR, Karnal; Dr. Raghunath Mandal, Assistant Professor in the Department of Plant Pathology, BCKV; and Dr. Anirban Maji, Assistant Professor in the Department of Genetics and Plant Breeding and In-charge of AICRPW&B,



BCKV, Nadia. The survey was supported by officials from the Agriculture Department of the Government of West Bengal and the Border Security Force at the Shikarpur border outpost. During the survey, the wheat crop was observed to be in its ripening stages at various locations. Data gathered from the Assistant Director of Agriculture's office in Jalangi block indicated that the area under wheat cultivation in this block for the current season is approximately 10,000 hectares. In discussions with farmers, it was noted that while most were unaware of the specific wheat variety they had planted, they had sourced their seed from Sri Ram Seed Pvt. Ltd. through local dealers. No significant pest or disease outbreaks were noted during the survey, and no signs of wheat blast disease were observed. However, the team did find some evidence of spot blotch and stem borer infestations in certain fields.

Karnataka

The surveys were conducted by Dr. Gurudutt Hedge and his colleagues from UAS Dharwad. However, most of the crops had dried up, except for the late-sown ones, where brown rust infection was reported.

Maharashtra

The survey of wheat crop was conducted in the month of March 2025 by Dr. M. A. Sushir, Junior Wheat pathologists Dr. V. M. Sali, Junior Plant Pathologist, and Dr. D. S. Kadam, Assistant Professor at RWRRS, Mahabaleshwar, conducted an assessment of wheat crops in Western Maharashtra. The normally sown wheat crops were at the maturity stage, while the late-sown crops were in the dough stage. Leaf rust was observed in both local and improved wheat varieties in farmers' fields, with infection levels reaching up to 20%. However, no incidence of stem rust was detected in any of the surveyed areas.



On March 24, 2005, Mr. B. M. Mhaske and Shri C. B. Beldar conducted a roving survey across the villages of Javalkevani, Vani, Sarate, Borgaon, Khirad, Tirhal B., Chankapur, and Manur, located in the Dindori, Surgana, and Kalvan tahsils of Nashik district, to assess crop health. The survey results showed widespread leaf rust affecting crops in most areas, with infection levels varying between 20% and 60%. Additionally, stem rust of the MS type was observed in specific varieties, including PunaShrabati (Private), Gujarat Sivhor (Private), and certain off-type mixtures, particularly in crops at the late dough to maturity stages. Leaf blight was noted in a few plots but remained minimal. Aphid infestations were moderate to low, while stem borer infestation was recorded at 1-2%. Control measures were recommended for the affected farmers. Overall, the condition of late-sown wheat crops in the surveyed areas was good, with early and timely-sown crops already harvested. Furthermore, the Wheat Disease Monitoring Nursery in Pimpalgaon Baswant remained free of both leaf and stem rust, with trials completed in the last week of March. Climatic conditions during this period were favorable for wheat growth, with maximum temperatures ranging from 38.6°C to 31.3°C and minimum temperatures between 4.2°C and 16.3°C. There were no reports of unusual rainfall or hailstorms.

Table 1: 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
10/03/2025	Satara, Sangli and Kolhapur district area	grain filling and maturity stage	Leaf rust was observed up to 10S in farmers field on local and improved varieties	--
24/03/2025	Dhule, Jalgaon, and Sambhajinagar district area	Maturity to harvesting stage	Leaf rust was observed up to 20S in farmers field on local and some improved varieties	--
27/03/2025	Ahilyanagar and Pune district area	Maturity stage	Leaf rust was observed up to 20S in farmers field on some improved varieties	--



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Karnal 132001

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