



# IDENTIFYING NEW DISEASE RACES OF CEREAL RUSTS AND MILDEWS



## Disease Sampling

The UKCPVS is always monitoring for changes in pathogen populations or new races of cereal rusts and mildews across the UK.

We rely on samples sent in by growers, agronomists, plant breeders and official trials operators, so we can check for new variations of these key wheat and barley diseases.

Each year the UKCPVS requests samples of infected leaves showing signs of wheat yellow rust and wheat brown rust. These infected leaves will give the team at Niab the isolates needed to conduct the survey to identify any possible changes in the race of the diseases as soon as possible.

We welcome samples at any time of year. The majority are sent through in May, June and July - the peak of the rust and mildew season - but we receive some in the autumn when conditions have been mild enough for the disease to carry on from the season before.

Samples can be from any variety, but we are especially interested in varieties which are noted as resistant to the different diseases at that time.



## Sending in Samples

Please follow the simple guidelines to ensure the sample reaches the UKCPVS in the best possible condition to allow the team to isolate the disease.

### Wheat Yellow Rust and Brown Rust

Samples should consist of 5-10 infected leaves. The rust should be active and fresh-looking to ensure that it is still viable once it reaches us. Fold each leaf lengthwise, upper surfaces together and put in a paper envelope with a completed sample form (overleaf), telling us where the sample has come from, and post to UKCPVS using the freepost address below.

### Mildew

As with the rusts, pick 5-10 infected leaves showing active and fresh-looking disease. Fold leaves lengthwise as before, and place them, with the accompanying form, into a paper envelope and post to the UKCPVS freepost address.

It is best to post samples on the same day they are collected and earlier in the week, if possible, to avoid delays in transit. This ensures the samples are in the best possible condition when they arrive.

Please do not send samples in plastic. Paper envelopes only. When sending samples, only use the words FREEPOST UKCPVS on the front of the envelope.

**Send samples to:  
FREEPOST UKCPVS**

Contact us for further information or to discuss possible Sightings:



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# Sampling Form

Please complete this form and send with the sample for virulence analysis.

**All samples to be sent to FREEPOST UKCPVS**

It is not compulsory to include contact information. However, it would be useful for NIAB to be able to contact you after a sample has been received in case we have any further questions. All personal data supplied will be kept confidential to the UKCPVS project and will be deleted after two years of the sample submissions. Full details of the NIAB privacy policy can be found on [www.niab.com](http://www.niab.com).

Crop:.....

Disease: .....

Sample no (FOR OFFICE USE ONLY)	Host Variety	Sampling date	Location (Include country & postcode if known) AHDB trials operators – include trial ID)	Severity of attack (% leaf area infection)	Crop growth stage	Sample details Please tick any boxes that may apply <input checked="" type="checkbox"/>	Additional information
						<b>Location:</b> <ul style="list-style-type: none"> <li>• Farm ..... <input type="checkbox"/></li> <li>• Trial site ..... <input type="checkbox"/></li> <li>• Other..... <input type="checkbox"/></li> </ul> please give details <b>Seed:</b> <ul style="list-style-type: none"> <li>• Farm sown ..... <input type="checkbox"/></li> <li>• Commercial ..... <input type="checkbox"/></li> </ul> <b>Fungicide application:</b> <ul style="list-style-type: none"> <li>• Treated ..... <input type="checkbox"/></li> <li>• Untreated ..... <input type="checkbox"/></li> </ul> <b>Previous crop:</b> <ul style="list-style-type: none"> <li>• Wheat..... <input type="checkbox"/></li> <li>• Other..... <input type="checkbox"/></li> </ul> please give details	

\*If foci are present, give assessment for foci and as plot/field as a whole.

Name: .....

Telephone: .....

Address: .....

Mobile: .....

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Email: .....