

UKCPVS DISEASE MONITORING AND THE BENEFIT TO UK GROWERS

The UK Cereal Pathogen Virulence Survey (UKCPVS) was set up in 1967 to alert growers, breeders and agronomists to any important changes in the populations of important cereal pathogens. Today, UKCPVS monitors the fungal pathogens causing wheat yellow and brown rust. UKCPVS directly and indirectly benefits growers, agronomists, breeders and researchers with some key benefits.

Young plant resistance ratings for AHDB Recommended List (RL)

UKCPVS undertakes young plant resistance testing in field and controlled growth room environments using a representative subset of rust isolates from the current sampling year. An understanding of varietal susceptibility at the young plant stages gives added information, so growers can make informed varietal choices and crop management plans.

Data for wheat rust RL watch lists

Watch Lists flag unusual levels of yellow rust and brown rust compared to the RL disease rating. This extra layer of information may provide a valuable early warning of a potential change in the UK's rust race structure and help focus in-season management strategies.

Detailed young plant differential testing

UKCPVS tests a subset of rust isolates against a panel of wheat differential lines with known resistance genes at the seedling stage. It provides information regarding potential changes in the pathogen race structure.

A better understanding of how rusts affect our UK wheat varieties

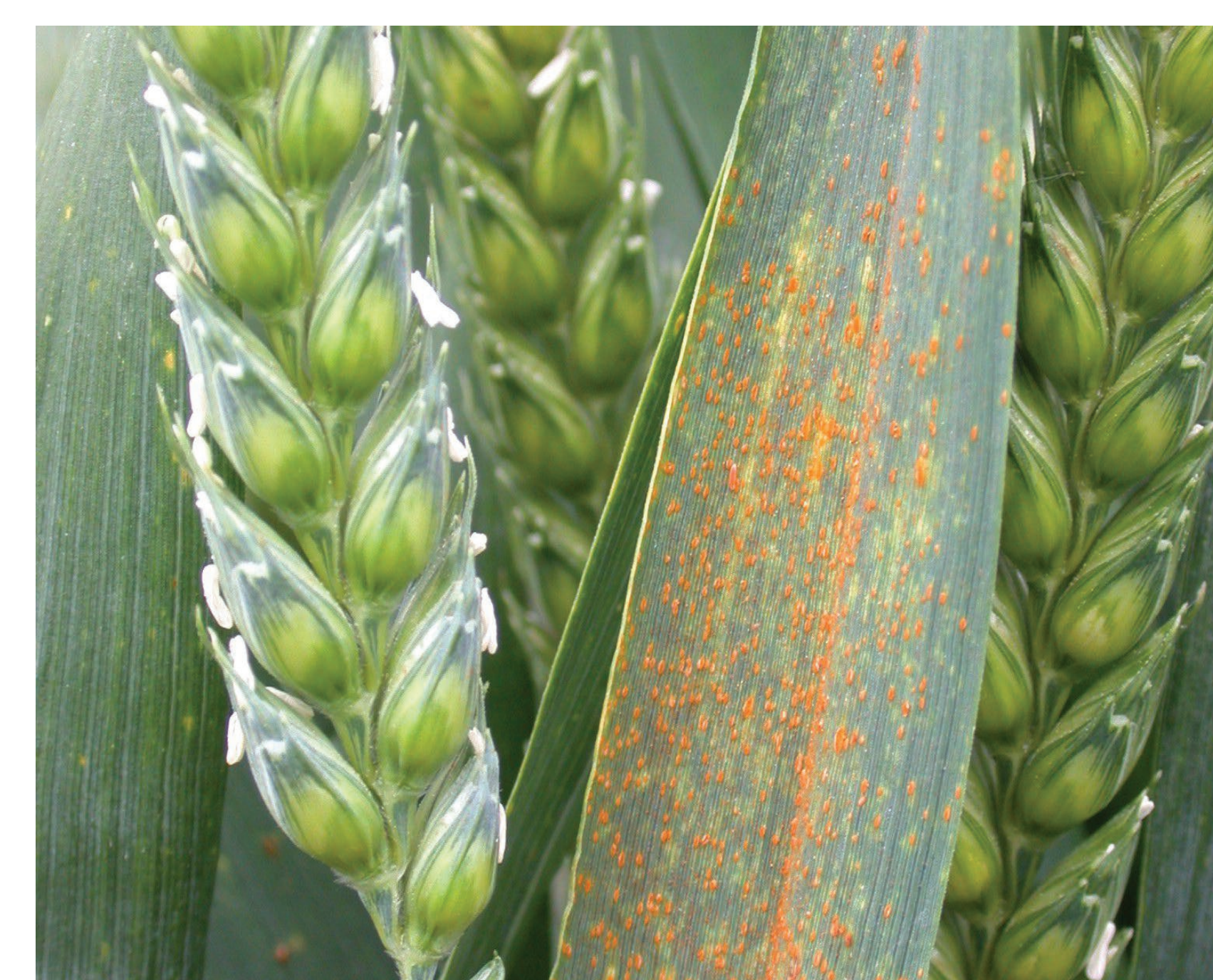
UKCPVS provides an early warning system and useful information about the pathogen's evolution. It supports the RL ratings and underpins the work of AHDB, collating information about the disease season each year including reports of unusual sightings, samples with host and location details, and young plant data. Results are disseminated in the UKCPVS Annual Report, RL ratings, and the annual Stakeholders event (January).

Provision of relevant rust isolates for inoculated VL and RL trials

UKCPVS monitors and tracks the spread of disease, identifies and provides prevalent and diverse isolates for use in Variety Listing and Recommended Listing testing. This is important to guarantee the future varieties are always tested against the most recent isolates to ensure resistant varieties, along with other desired agronomic traits, are available to growers.



Yellow rust



Brown rust

SEND US YOUR RUST SAMPLES!

Samples from any wheat variety can be sent via the FREEPOST UKCPVS service. It is essential to obtain as diverse a set of samples as possible from across the country. Rare and unusual races are often found in only one sample from one location. For more information including sampling instructions and contacts scan the QR code:



The UK Cereal Pathogen Virulence Survey (UKCPVS) monitors cereal rusts in the UK, detecting and warning industry and growers of new races of disease emerging on resistant varieties. It is funded by Defra and AHDB and has been managed by Niab since its inception nearly 60 years ago.