

WHEAT GROWERS BENEFIT FROM UKCPVS DISEASE MONITORING



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

Provides young plant resistance ratings for AHDB Recommended List (RL)

- Two broad types of resistance – adult plant resistance (resistance induced after stem extension) and young plant resistance (effective at all growth stages). UKCPVS provides young plant resistance status data from a diverse set of rust isolates each year.
- An understanding of varietal susceptibility at all growth stages gives added information, so growers can make informed varietal choices and crop management plans.

Provides data for wheat rust RL watch lists

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



UKCPVS provides a better understanding of how rusts affect our UK wheat varieties

- Provides an early warning system and useful information about the pathogen's evolution.
- Supports the RL ratings and underpins the work of AHDB.
- Collates all information about the disease season each year; reports of unusual sightings, samples with host and location details, seedling and adult plant data and yellow rust genotyping data.
- Results are disseminated in the UKCPVS Annual Report, RL ratings and the annual Stakeholders event (March).

Provides relevant rust isolates to screen new candidate varieties

- UKCPVS monitors and tracks the spread of disease and identifies and provides prevalent and diverse isolates for use in Variety Listing and Recommended Listing.
- 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.



WE NEED YOUR HELP!

Samples from any wheat variety can be sent via the FREEPOST UKCPVS service. It is essential that 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. Further details on sampling can be obtained from Charlotte Nellist (charlotte.nellist@niab.com / 01223 342200).

Funded by AHDB and APHA, and managed by NIAB, UKCPVS has been monitoring cereal rusts and mildews in the UK since 1967. It provides an early warning system to growers and plant breeders of new races of disease that could overcome current variety resistance and underpins the AHDB Recommended List disease resistance ratings.