

### Mancozeb – Factsheet

The Mancozeb Task Force, a joint activity of UPL Europe Ltd and Indofil Industries Ltd have released a factsheet highlighting the latest status of mancozeb, a non-systemic fungicide, which is effective on over 400 pathogenic fungi – including foliar fungal diseases such as scab, leaf spot, early blight, rust, leaf blight, downy mildew, cucurbit scab and leaf blotch.

No resistance to Mancozeb has been detected in the last 60 years and it has a range of benefits, including:

- Multi-site action and disease coverage.
- Continued effectiveness against usual diseases.
- Low dose efficacy, so appropriate for use in mixtures.
- Not volatile.
- Contains Zn & Mn.
- Suitable for IPM programmes.



Mancozeb is currently authorised in 28 EU states and the initial authorisation – which lasted up to 2016 – has been extended until 2018.

Once a decision has been made by the European Commission, authorisation of Mancozeb is expected to take place by October 2018.

Mancozeb has been used since 1962 and is currently authorised in 28 EU Member States. Mancozeb' initial authorisation until 2016 has been extended until 2018 and is due for renewal in 2018. Mancozeb is a key product for control of blight in potatoes and a 2015 ADAS report on the economic impact of Mancozeb calculated that the loss of Mancozeb could lead to total increased production costs of between 4m and 56m as well as a fall in potato yields of 223,000t in the UK. Therefore it is crucial that the European Commission adopts robust, proportionate and science-based criteria when deciding whether to re-authorise Mancozeb.

For more information please click [here](#).

## 50 years of pathogen monitoring

This year marks 50 years since the co-ordinated monitoring of cereal pathogen populations in the UK began through the UK Cereal Pathogen Virulence Survey (UKCPVS). Prior to 1967, although researchers were aware that pathogens were able to adapt to advances in plant breeding, pathogen surveillance was not done in the same co-ordinated manner as the UKCPVS.



There are numerous historical examples of resistance breakdown, for example in 1932, yellow rust resistance broke down in the wheat variety Vilmorin 23. In the same year, NIAB (who at the time managed the recommended lists) observed that Little Joss was 'unusually resistant to yellow rust' compared to many other varieties at that time.

By the 1950s, numerous institutes played a role in the monitoring of commercial crops (e.g. by NIAB) and plant breeding material (e.g. by PBI). However, the breakdown of yellow rust resistance in the wheat variety Rothwell Perdix, which previously carried a yellow rust resistance rating of 9 (the maximum) led to the development of the Physiologic Race Survey of Plant Pathogens' as it was then known, which became the UKCPVS that we know today.

In the 1960's the Physiologic Race Survey of Plant Pathogens focused on the key cereal plant pathogens at that time, covering:

- Wheat and barley yellow rust
- Wheat and barley powdery mildew
- Oat powdery mildew and oat crown rust
- Rhynchosporium
- Oat leaf spot

One of the benefits of co-ordinated monitoring of pathogens is that it provides an early warning to industry about potential new races as there is often a lag between a change being detected in the pathogen population and the eventual revision of disease ratings observed.

The UKCPVS also introduced the Diversification Scheme for yellow rust in 1976. The scheme grouped wheat varieties according to their susceptibility to yellow rust races which helped growers select varieties with a diverse mixture of resistance genes and spread risk across the farm. However, the arrival of Warrior race in 2011 did not fit into this system as it was so diverse it meant that varieties all reacted in slightly different, and often unpredictable ways, meaning it was no longer possible to group varieties. Since then the UKCPVS has detected other yellow rust varieties such as the Kranich race and the newly named WYR Blue 7 (first detected on Invicta) (Table 1).