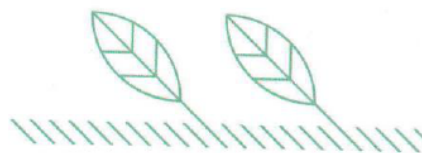




Symposium

**AGROBIODIVERSITY
ALONG THE VALUE CHAIN**

December 4th - December 6th 2023



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Dear participant,

It is our great pleasure to welcome you to Ghent (Belgium) on the occasion of the 1st international CROPDIVA symposium 'Agrobiodiversity along the value chain' (4th to 6th of December 2023). This international symposium aims to stimulate knowledge exchange and interactions between researchers and stakeholders interested in agrobiodiversity. The symposium covers a wide range of topics, organised in the following scientific sessions:

- Genetics: How they shape agrobiodiversity?
- The impact of cropping systems on agrobiodiversity
- Food and feed technology, drivers of change on agrobiodiversity
- Agrobiodiversity: the challenges and opportunities for socio-economic sciences

We are very pleased to welcome Prof Johan Six (ETH-Zürich), Prof Andreas Börner (IPK-Gatersleben) and Prof Carl Lachat (Ghent University) as keynote speakers. They will undoubtedly give inspiring lectures on the various aspects of agrobiodiversity.

We hope that this symposium will be a good opportunity to improve agrobiodiversity in the value chain.

We wish you a pleasant stay in Ghent and hope that you will enjoy not only the scientific program, but also the Belgian hospitality and the social activities we will organise.

Prof. Geert Haesaert

Chairman of the symposium and coordinator of the CROPDIVA project

Outbreak of yellow rust on triticale in Serbia

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Triticale (\times Triticosecale Wittmack) is a hybrid obtained by crossing wheat (*Triticum* sp.) and rye (*Secale* sp.). Triticale possesses favorable agronomic characteristics compared to wheat and rye, including suitability for cultivation in poor and acidic soils or under cold conditions. The causal agent of yellow rust in triticale (*P. striiformis* f. sp. *tritici*, Pst) is one of the pathogens responsible for significant yield and quality losses. An aggressive race of Pst, first discovered in Europe in 2006 on the island of Bornholm on triticale, has become common in widely grown triticale varieties in Germany and Scandinavia. Although the race belongs to *P. striiformis* f. sp. *tritici*, it has never been found on winter wheat varieties in Europe. The aggressive triticale race has led to yield losses of up to 100% in Scandinavia, where controlling triticale epidemics in organic production has proven challenging. It is worth noting that Pst races Warrior and Kranich, which caused significant wheat yield losses in Europe since 2011, were also detected on triticale. During the 2022/2023 growing season on locality Rimski šančevi (Vojvodina, North Province of Serbia) yellow rust was recorded on triticale in Serbia for the first time. Among 280 tested triticale genotypes, 39.4% were infected with yellow rust with a disease index (DI) exceeding 50%. Only 0.9% of genotypes were infected with yellow rust with a DI less than 10%. The remaining genotypes showed infection within the following ranges: 11% \leq DI \leq 20% (4.8%); 21% \leq DI \leq 30% (10.8%); 31% \leq DI \leq 40% (20%); and 41% \leq DI \leq 50% (24.2%). Symptoms of yellow rust disease have been observed on triticale in the form of yellow uredosori arranged in regular rows along the leaf veins. In contrast to the symptoms of yellow rust in wheat, the infection type of yellow rust on triticale is accompanied by more pronounced necrosis of the leaves during severe attacks. The dimensions of uredospores ranged from (18.7–33) to (15–28.2) μm . Despite the occurrence of yellow rust on wheat in Serbia in previous years, it had not been registered on triticale until 2023. Consequently, this study provides not only information on possible sources of resistance but also highlights the need for increased attention to monitor yellow rust populations in Serbia to ensure effective control management.

Acknowledgement

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