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The influence of different isolates of Turnip yellows virus (TuYV) and biotypes of *Myzus persicae* on rapeseed infection

Torsten Will

Heiko Ziebell, Regina
Kölzsch, Maria Kern,
Jonas Hartrick, Thomas
Thieme

Institute for Resistance
Research and Stress
Tolerance, Julius Kuehn
Institute, Quedlinburg,
Germany

Rapeseed is an important, globally grown oil plant, used for food and technical applications. In recent years, Turnip yellows virus (TuYV) turned out to be a serious threat to rapeseed production due to climate change and the ban of neonicotinoids for seed treatment. In Germany, TuYV monitoring was conducted between 2015 and 2017 revealing constantly high infection rates. Several parameters such as environmental factors (temperature, drought) aphid abundance, aphid biotype, virus isolate and cultivar seem to affect virus infection in the field. In order to get more detailed information, we compared the influence of different virus isolates and different aphid biotypes on infection rates and symptom severity under greenhouse conditions. The virus isolates and *Myzus persicae* biotypes (previously characterized by DNA barcoding) were collected throughout Germany and surrounding European countries. In summary both, virus isolate and aphid biotype influence infection rates of rapeseed as well as symptom severity.

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