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BOOK OF ABSTRACTS



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Latest advancements in knowledge and management of *Ralstonia* species

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VARIETY OF PATHOGENICITY OF *RALSTONIA SOLANACEARUM* STRAINS.

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Text

Brown rot of potato caused by *Ralstonia solanacearum* (Rs) (Smith) Yabuuchi et al., is one of the most important quarantine diseases of the plant. Its presence is usually associated with significant economic losses to the potato industry where the disease exists. One of the most crucial factors responsible for the uncontrolled spread of the pathogen in the environment and during the production process is its pathogenicity. Of the four phylotypes of the *Ralstonia* species listed in EPPO diagnostic protocol No. PM 7/21, each consisting of many different phylogenetic and pathogenic variants, one of the most virulent genotypes is phylotype IIB 1 (formerly known as race 3 biovar 2). This phylotype is particularly harmful because it has a relatively low growth temperature (approximately 27 °C) and often causes latent (asymptomatic) infections. It can relatively easily adapt to colder climates and is favored by the wetness of the soil. Also, the presence of the pathogen in low concentrations in potato tissue is very dangerous and allow to contributes to its rapid spread of it in the environment. In all the above cases, it is essential to determine the virulence of pathogenicity of the pathogen, which was the purpose of the research. The obtained results allowed for the determination of the influence of the examined *Ralstonia solanacearum* strains, on the level of expression symptoms on the tested plants and for comparison with the obtained result of the molecular test.