Workshop

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Dry lenticel rot – An emerging postharvest disorder on apples in northern Italy

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Abstract

Symptoms of dry lenticel rot, also known as Ramularia spots, were first observed 2012 on apples after long-term conservation in the cold storage in South and Tyrol Piedmont (Northern Italy). Since then, only few notifications of this postharvest disorder were made from the fruit growers cooperatives. However, since 2019, a notable increase of dry lenticel rot, has been observed in South Tyrol and recently, occurrence of similar symptoms has been reported from other apple growing areas in Austria and France. A collection of more than 100 fungal isolates from affected fruit and originating from various orchards was established. Subsequent multi locus sequencing analysis of five gene loci identified Ramularia mali as causative agent of this postharvest disease. Nevertheless, isolates of deviating morphology and genetic variability were identified and thus, their impact on the disorder needs to be investigated. Ramularia mali is able to switch from endophytic to epiphytic lifestyle, however, the trigger for this switch remains to be elucidated. Symptom development might be linked to the apple peels' microbiome composition, thus, metabarcoding of the fruits' endo- and epiphytic microbiome shall provide further information and contribute to the identification of potentially antagonistic or beneficial microorganisms for further applied research.