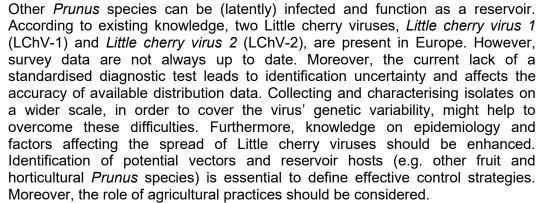


Unravelling the Little Cherry disease complex at European scale to improve transnational diagnostics and management of the disease

Little cherry viruses have the potential to cause substantial damage to cherry production. Mainly sweet cherry, but also sour cherry cultivars are identified as sensitive host plants.



The main goal of the project was to generate more epidemiological information on the Little cherry viruses and to improve diagnostics. The research has led to:

- Updated distribution maps
- Enhanced knowledge on the genetic diversity of the Little cherry viruses isolates
- Validated diagnostic tests, through an interlaboratory validation
- New insight into the epidemiology and spread of Little cherry viruses (vectors, host plants, etc.)
- Raised awareness of Little cherry viruses problems and preventive measures
- A reflection on consequences for future EU legislation (quarantine / certification)

The different partners of the project contributed by collecting infected material. Some countries (Jordan, Morocco, Romania, Turkey) also organized a national survey.





The samples collected were processed and sequenced through High Throughput Sequencing (VANA strategy) and have contributed to increase the knowledge on the epidemiology of the viruses. The collaboration led to first reports, in several participating countries, not only on findings of little cherry viruses (Tahzima *et al.*, 2017, 2019a), but also on several co-infecting viruses (Tahzima *et al.*, 2019 b, c) or associations with phytoplasmas (Salem *et al.*, 2019). Additionally, a test performance study was organized on the tests for the detection of LChV-1 (Bajet *et al.*, 2008; Glasa *et al.*, 2015) and LChV-2 (Eastwell and Bernardy 2001; Rott and Jelkmann 2001) that are routinely used by the participating laboratories. The results revealed a good analytical specificity and sensitivity, as well as high percentages for repeatability and reproducibility for both tests and for both viruses. The project is currently in its final phase and full results/report will be available after the final meeting in October 2019.

Project ID: Unravelling the Little Cherry disease complex at European scale to improve transnational diagnostics and management of the disease (EURAVELCH)

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