

Determine different *Plum pox virus* strains in wild hosts and in stone fruit cultivars with different susceptibility as a part of improved control and surveillance strategies







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Research consortium

AGES (AT), BPI (GR), NFCSO (HU), INIA (ES)

Contact information

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Key outputs and results

- Collection of empirical data of PPV in tolerant/resistant Prunus hosts
- Collection of empirical data of PPV in wild hosts
- Identification of viruses which cause the same symptoms as PPV
- PCR techniques to distinguish PPV strains
- Improved control and surveillance strategy

Goals

Plum pox virus is the most important and devastating virus disease causing the highest economic impact in stone fruits worldwide. The hosts of PPV are the fruit -producing species and wild and ornamental species of Prunus. Eight PPV strains have been identified based on their biological, serological and molecular properties. For an effective control and surveillance strategy it is important to use PPVfree plant material, tolerant/resistant cultivars and eradication of diseased plants. PPV infection is coming out with any visual symptoms on sampled leaves (plum, apricot, peach, samples taken in summer) in Hungary in the last years. But further investigation showed that typical PPV symptoms are caused by some other viruses and that probably there is something else in the samples which causes these symptoms. An improved control and surveillance strategy requires a correlation between the presence and absence of typical PPV symptoms and PPV in the plants. From an epidemiological point of view it is necessary to include also wild host in surveillance activities and to determine the strains of PPV, because of the different damage impact. The project has the goal to collect empirical data on PPV in wild hosts and in stone fruit cultivars with different susceptibility in fruit producing and adjacent areas. The strain differentiation of the PPV isolates will give a deeper insight into the epidemiology of this pathogen