

Preventing *Xylella fastidiosa* introduction in Serbia - challenges in pathogen detection

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Recent interceptions of *Xylella fastidiosa* in asymptomatic ornamental plants imported from Central America into Europe imposed restrictions in international trade of live plant material. Serbia is considered a *Xylella*-free country and the status has been checked periodically by surveying and sampling of potential host plants mainly of the external origin. Since the establishment of *X. fastidiosa* in Italy and later in France, a number of plant species inspected and sampled for the analysis at the border crossings have increased rapidly. Received plant samples were tested first by conventional PCR according to Minsavage *et al.* (1994). DNA was extracted from the xylem tissue taken from various parts, depending on the sample material, by using the DNEasy plant mini kit (Qiagen). DNA from *X. fastidiosa* subsp. *pauca* strain CoDiRo was used as a positive control. No pathogen was detected in 173 samples in 2016 and 126 samples in 2017. However, a few reactions associated with testing of sweet cherry samples repeatedly produced a faint band of similar size as the expected product (ca. 700 bp). The samples were additionally tested by qPCR (Harper *et al.* 2010, erratum 2013). The qPCR results were negative for the presence of the targeting gene (*rim M*). Consequently, the samples were considered pathogen free. The conventional PCR false positive signal confirmed the necessity for continuous improvement of the practice and expertise facilitated by the POnTE project (GA 635646).

Minsavage *et al.* (1994); Harper *et al.* (2010, erratum 2013)