



Brussels, 15.12.2017

**COMMISSION DATABASE OF VALIDATED TESTS FOR THE IDENTIFICATION OF THE XYLELLA FASTIDIOSA AND ITS SUBSPECIES AS REFERRED TO IN ARTICLE 3 OF COMMISSION IMPLEMENTING DECISION (EU) 2015/789**

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**A. Tests for the screening and identification of the presence of *Xylella fastidiosa***

*1. In Demarcated Areas and sites of production referred to in Article 9(8) of Decision 2015/789*

- Conventional Polymerase Chain Reaction (PCR) based on Minsavage *et al.*, 1994(\*);
- Real time PCR based on Francis *et al.*, 2006(\*);
- Real time PCR based on Harper *et al.*, 2010 (and erratum 2013);
- Loop-mediated isothermal amplification (LAMP) based on primers developed by Harper *et al.* (2010, erratum 2013);
- Enzyme Linked Immunosorbent Assay (ELISA), using polyclonal antibodies able to identify all subspecies of the specified organism;
- Immunofluorescence (IF), using polyclonal antibodies able to identify all subspecies of the specified organism;

*2. In areas other than Demarcated Areas and in sites of production other than the ones referred to in Article 9(8) of Decision 2015/789*

- Real time PCR based on Harper *et al.*, 2010 (and erratum 2013);
- Loop-mediated isothermal amplification (LAMP) based on primers developed by Harper *et al.* (2010, erratum 2013).

**B. Molecular tests for the determination of the subspecies of *Xylella fastidiosa*\*\***

- Multi Locus Sequence Typing (MLST) based on Yuan *et al.*, 2010 determining all subspecies;
- PCR based on Hernandez-Martinez *et al.*, 2006 determining the subspecies *fastidiosa*, *multiplex* and *sandyi*\*\*\*;
- PCR based on Pooler & Hartung 1995 determining the subspecies *pauca*.

(\*) The method does not allow the detection of all known isolates.

(\*\*) Molecular tests applicable on DNA extracts.

(\*\*\*) For *multiplex* determination, it does not work on plant extracts.