



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR HEALTH AND FOOD SAFETY

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(2) OF COMMISSION IMPLEMENTING DECISION (EU) 2015/789

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 identification 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.