agriculture

MDPI

Article

Detection of *Xylella fastidiosa* in host plants and insect vectors by droplet digital PCR

Serafina Serena Amoia[1,2], Angelantonio Minafra[1], Angela Ligorio[1], Vincenzo Cavalieri[1], Donato Boscia[1], Maria Saponari[1], Giuliana Loconsole[1]*

[1] Institute for Sustainable Plant Protection (IPSP)—National Research Council, 70126 Bari, Italy
[2] Department of Soil, Plant and Food Sciences, University of Bari Aldo Moro, Bari, Italy
*Correspondence: giuliana.loconsole@ipsp.cnr.it.

Supplementary files:

-Supplementary Figure S1: Evaluation of the optimal amount of olive and insect extracts to set up ddPCR reactions.

-Supplementary Figure S2: Calibration curves of qPCR

- Supplementary Figure S3: Linear regression curves of the ddPCR assay

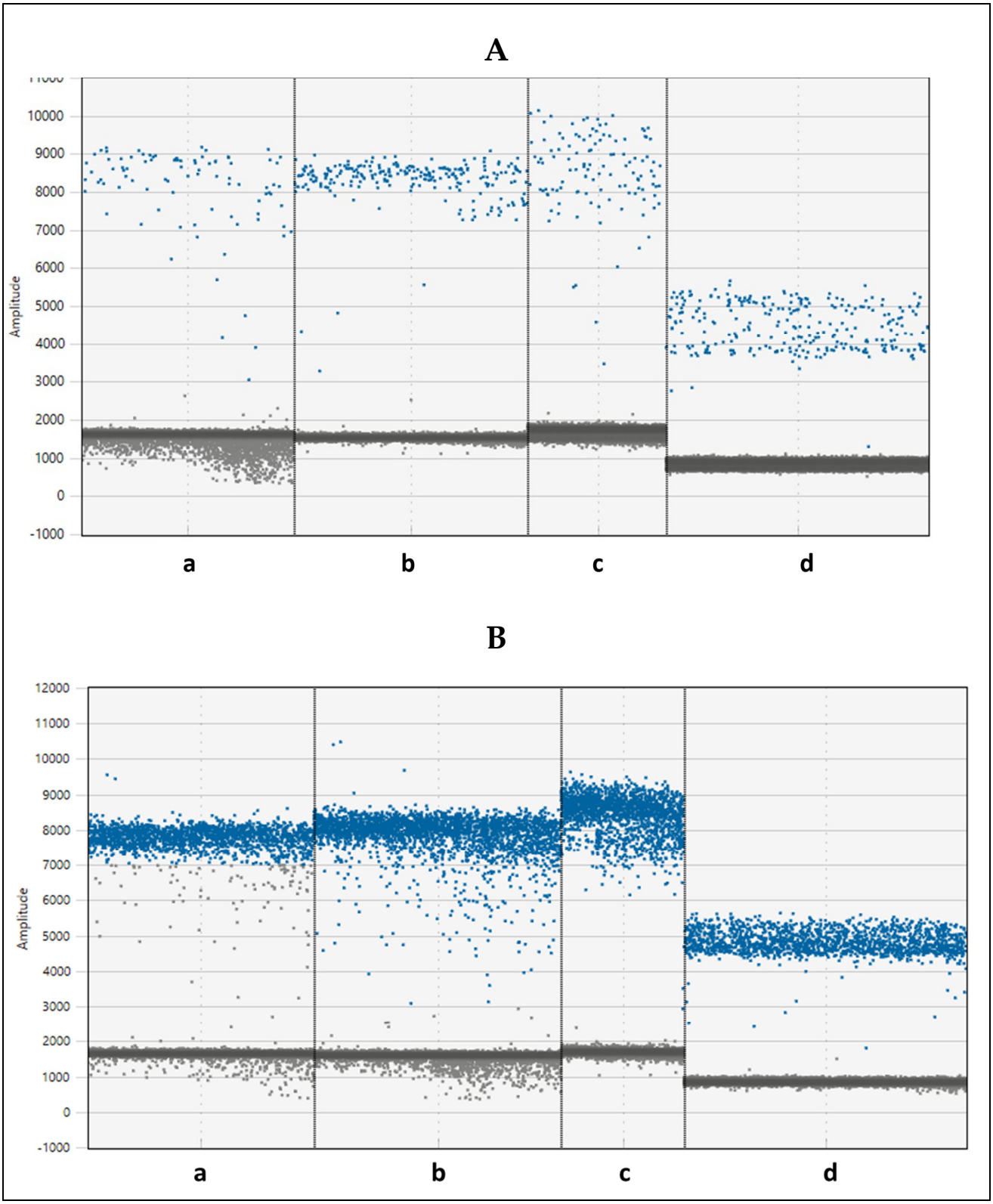
Citation: Amoia, S.S.; Minafra, A.; Ligorio, A.; Cavalieri, V.; Boscia, D.; Saponari, M.; Loconsole, G. Detection of *Xylella fastidiosa* in Host Plants and Insect Vectors by Droplet Digital PCR. *Agriculture* **2023**, *13*, 716. https://doi.org/10.3390/agriculture13030716

Academic Editor: Filippo De Curtis

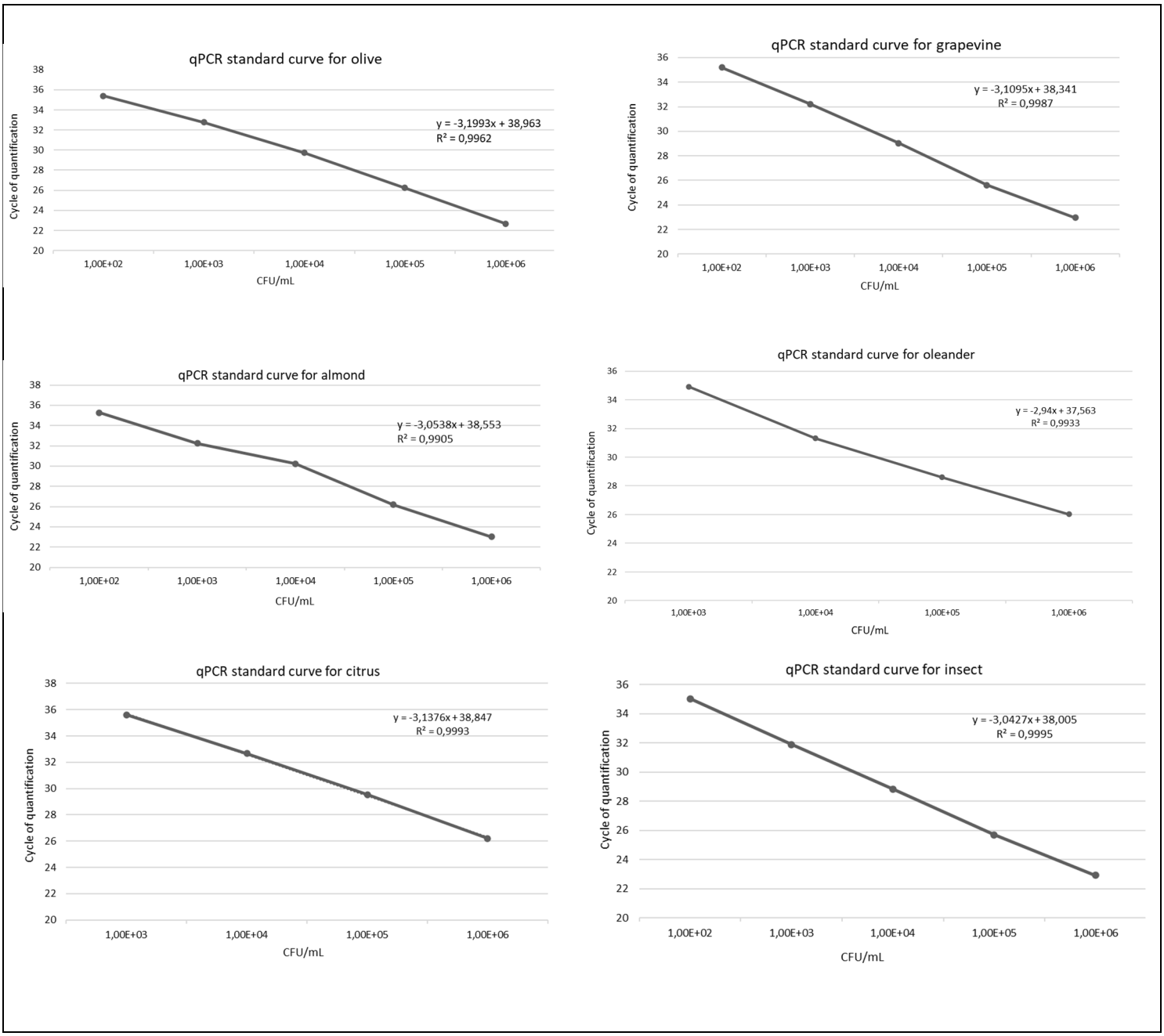
Received: 28 December 2022
Revised: 10 February 2023
Accepted: 17 March 2023
Published: 20 March 2023

Supplementary Figure S1. Evaluation of the optimal amount of olive (A) and insect extracts (B) using the ddPCR conditions reported by Dupas *et al.*, 2019. On x-axis: Amplitude value. On y-axis: DNA amounts tested; a: 2 µL; b : 4 µL;c: 6 µL; d: 8 µL. The best positive and negative droplet separation was achieved employing 4 µL and 6 µL of purified DNA for plant and insect, respectively.

.



Supplementary Figure S2. Standard curves of qPCR assays on purified DNA from ten-fold serial dilutions of bacterial cell suspension (from 10^6 to the limit of detection, LOD) spiked in plant and insect matrices. Slopes and determination coefficients (R^2) are indicated in the figures.



Supplementary Figure S3. Linear regression curves of the ddPCR assay, for the plant and insect matrices evaluated, were constructed employing the same ten-fold dilution series tested with the qPCR assay. The vertical axis shows the measured copies/µL of the ddPCR reaction mixture.