

## DETECTION OF THE PRESENCE OF QUARANTINE PATHOGENS *Xylella fastidiosa* IN POTENTIAL HOST PLANTS OF SRI LANKA

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*Xylella fastidiosa* is a gram negative, xylem-colonizing, vector-transmitted phytopathogenic bacterium that affects around 600 plant species. The European Union has set quarantine regulations for *X. fastidiosa* and demanded proof of pathogen-free certification before exporting. Though Taiwan is currently the only Asian country with a long-standing presence of *X. fastidiosa*, there are chances the bacterium to be present to Sri Lanka. Therefore, this research was carried out to determine whether *X. fastidiosa* was present in possible host plant species in Sri Lanka. In total, 130 composite samples were collected from potential host plant species listed in European Union Regulation 2029/1201 of August 14<sup>th</sup> 2020, from 09 different districts: Kalutara, Rathnapura, Kurunegala, Kegalle, Jaffna, Galle, Nuwara Eliya, Hambanthota, and Badulla. The specific primers for a conserved genomic region of the polymerase sigma factor of the *rpoD* gene of 733 bp were used to detect the presence of *X. fastidiosa* by PCR in the collected samples. The gene obtained from the French collection of Plant Associated Bacteria, CIRM-CFBP was used as the positive control in detecting the PCR products by gel electrophoresis. The results showed that no *X. fastidiosa* bacterium was present in any of the collected samples.

**Keywords:** European Union Regulation 2029/1201, Quarantine pathogens, RNA polymerase sigma factor, *rpoD* Gene