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**ELECTRONIC
ABSTRACT BOOK**

**802 / NEW DATA ON PRESENCE OF CANDIDATUS PHYTOPLASMA
SOLANI ON POTATO IN VOJVODINA PROVINCE****09****Keywords:** *potato, Candidatus Phytoplasma solani, 16S rRNA***Aleksandra Jelušić** / University Of Belgrade, Institute For Multidisciplinary Research, *Serbia***Renata Iličić** / University of Novi Sad, Faculty of Agriculture, Novi Sad, *Serbia***Goran Barać** / University of Novi Sad, Faculty of Agriculture, Novi Sad, *Serbia***Sanja Marković** / University of Belgrade, Institute for Multidisciplinary Research, Belgrade, *Serbia***Aleksandra Jelušić** / University of Belgrade, Institute for Multidisciplinary Research, Belgrade, *Serbia***Slaviša Stanković** / University of Belgrade, Faculty of Biology, Belgrade, *Serbia***Tatjana Popović** / Institute for Plant Protection and Environment, Belgrade, *Serbia***BACKGROUND**

Bačka (Vojvodina, Serbia) is one of the main potato-growing areas in Serbia. The presence of the stolbur-associated symptoms in the form of reddening and leaf rolling, shortened internodes, and aerial tuber formation were frequently noticed on the potato plants. Therefore, the identification of the causal agent of the disease was initiated, considering that presence of phytoplasmas was not earlier reported in Maglić locality.

OBJECTIVES

This research aimed to identify the causal agent of the phytoplasmas' disease in potato field (unknown cultivar) in locality Maglić (Bačka) in 2021.

METHODS

Samples for the identification within the survey site consisted of pooled multiple diseased plants (leaves and tubers). Genomic DNA from the ten pooled samples was extracted using the Cetyltrimethyl ammonium bromide (CTAB) method. Identification was performed with polymerase chain reaction (PCR) using universal phytoplasma 16S rRNA primer pair P1/P7. The obtained sequences were checked for identity with the deposited strains in the NCBI database using the BLASTn search tool. Further, Neighbour-joining (NJ) tree was made to reconstruct the phylogeny of potato strains in relation to deposited strains in the NCBI database.

RESULTS

PCR amplification performed with primer pair P1/P7 resulted in amplicon generation at 1800 bp for three (two from tubers and one from leaves) out of a total of ten tested samples. BLASTn analysis revealed 100% identity of potato strains with deposited strains of *Candidatus Phytoplasma solani*, the 16SrXII-A ribosomal subgroup. NJ phylogenetic analysis grouped potato strains in the same tree cluster with NCBI deposited strains of *Ca. Phytoplasma solani*.