First report of persimmon cryptic virus in persimmon in North Macedonia

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During May 2018, numerous persimmon (*Diospyros kaki* L.) trees from orchards in Valandovo, southeastern of North Macedonia showed symptoms of leaf yellowing, interveinal chlorosis and extensive necrosis of the veinlets. Based on the observed symptoms we suspected on the possible presence of the persimmon cryptic virus (PeCV) (Morelli et al. 2015), a putative member of the genus *Deltapartitivirus*. PeCV was already reported in Italy, Turkey, Korea, Spain, and the USA.

Leaf samples from five trees (four symptomatic and one symptomless) were analyzed on the PeCV presence by RT-PCR. Total nucleic acids were extracted from fresh leaves with CTAB method (Li et al. 2008). RT-PCR reactions were carried out with two sets of specific PeCV primers (Morelli et al. 2015; Cho et al. 2016) targeting coat protein gene (dsRNA-2). Expected PCR fragments (144 bp and 526 bp with primers CryKaF/CryNeR and PeCVF/PeCVR, respectively) were obtained in all four leaf samples showing interveinal chlorosis and necrosis of the veinlets. PeCV was not detected in symptomless sample. Amplified DNA fragments of 526 bp of four isolates were purified and directly sequenced (Macrogen, Netherlands). Obtained nucleotide sequences were identical and deposited in the GenBank under accession Nos. MK722176–77 and MK931291–92. BLAST analyses of these PCR products revealed high level of nucle-

otide identity (96.5–100.0%) with sequences of six PeCV isolates available in the GenBank. PeCV isolates from North Macedonia showed highest nucleotide identity (100%) to isolate Algemesi from Spain (KX352444). To our knowledge, this is the first report of persimmon cryptic virus in persimmon in North Macedonia.

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