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High genetic diversity of *Plum pox virus* in subspontaneous trees in North Macedonia sheds new light into its evolutionary history

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Understanding plant virus spread and evolution at the agro-ecological interface is crucial to design appropriate disease management strategies and prevent variant emergence. Perennial plants are prone to harbor a high viral genetic diversity due to repeated and long-lasting infections and may thus provide a conducive environment to the emergence of new virus genotypes. Sharka, a serious disease of stone fruits (*Prunus*) worldwide, is caused by the plum pox virus (PPV, genus *Potyvirus*). Ten strains have been described so far, among which only three are widely distributed across Europe. In this study, we assessed the role of the wild compartment as a potential reservoir of PPV genetic diversity. We carried out a countrywide survey in North Macedonia, targeting cultivated trees, but also subspontaneous myrobalan trees (*P. cerasifera*) and wild blackthorn (*P. spinosa*) bushes. For PPV diagnosis and strain assignment, we designed new or used previously published polyvalent and strain-specific RT-PCR tests followed by partial sequencing. In *P. cerasifera*, we identified the three strains that are widespread in Europe (i.e., PPV-M, -D, -Rec), the geographically restricted PPV-T recombinant as well as PPV-An, one of the putative parents of the epidemic PPV-M strain and previously detected only once (in Albania). Furthermore, a PPV isolate distant from all known strains was detected and fully sequenced using Nanopore and Sanger technologies. Based on genetic distance, this isolate belongs to a new PPV strain, that we called PPV-P. Its aphid transmissibility and its ability to infect cultivated *Prunus* species were assessed experimentally, evidencing that this new strain has the potential to be epidemic in stone fruits. In contrast to *P. cerasifera*, cultivated species harbored only one (peach), two (apricot) or four (plum) PPV strains. These results suggest that *P. cerasifera* in the Balkans may be involved in the emergence of the PPV strains spreading in Europe.