DISEASE NOTE

FIRST REPORT OF PLUM POX VIRUS STRAIN PPV-T IN ALBANIA

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In previous surveys for the presence of Plum pox virus (PPV) in Albania, PPV-M prevailed largely whereas PPV-D and PPV-Rec were less represented. Natural mixed infections of strains M and D were also found, more frequently than expected in varietal collections (Stamo and Myrta, 2006). In spring 2011, a new field survey was carried out to collect representative PPV isolates from different areas of the country and evaluate their diversity. A total of 11 PPV isolates were recovered from symptomatic plants in 10 orchards located at Kavajë, Elbasan, Pogradec and Korçë. Samples were tested by DASI-ELISA using the monoclonal antibodies 5B (universal), 4DG5 (PPV-D specific) and AL (PPV-M specific), and two highly informative genome portions (P3-6K1 and N1B-CP) were sequenced to check for the presence of PPV-M, PPV-D PPV-Rec and other strains. Five of the tested Albanian isolates proved to be PPV-M, four were PPV-Rec, one was PPV-D and one PPV-T. Further comparative sequence analysis of the entire CP gene demonstrated that the isolate Al-08pl (from an European plum tree) diverged from the cluster of PPV-M isolates and was 99% identical to PPV-T (Serce et al., 2009). To our knowledge, this is the first report of PPV-T in Albania. To assess the importance of this new PPV strain in Albania, further work is needed. An interesting output of this study, is the fact that in a small collection of Albanian PPV isolates the biodiversity of this virus is very high (4 different strains in 11 isolates). This can be interpreted either as an indication of a long history of PPV presence in the country or as the consequence of frequent introduction events from outside.
