

Abstract

Downy mildew (*Plasmopara viticola* Berk. & Curt.), powdery mildew (*Uncinula necator* Schw.) and gray mould (*Botrytis cinerea* Pers.) are the most ubiquitously damaging disease of grapevines worldwide, reducing yield, vine growth and fruit quality. The mildew and powdery mildew attack all aerial parts of grapevine plants, while grape gray mould is frequently encountered on the mature berries, close to harvest. Incidence of the most important vineyard diseases was investigated in ampelographic collection belonging to Agricultural Sciences and Veterinary Medicine University (USAMV) from Iași (SE Romania) in 2012. Biological material was represented by different grapevine varieties, both table and wine grapes varieties. The field observations were correlated with yearly phenological and ecological elements which lead to prognoses and control of main fungal pathogen. Depending on degree of attack recorded for each cultivar the resistance or sensibility of analyzed cultivars (by OIV 1983) was established. The grape varieties taken in study showed different reactions under the same environmental conditions, materialized by different attack degrees of grapevine mildew, powdery mildew and grape gray mould. The aim of this study was to determine the presence and distribution of the most important vineyard diseases across the ampelographic collection of USAMV Iași (SE Romania) in 2012.

Key words: grapevine, fungal pathogens, ampelographic collection