

Diversity of Diatrypaceae species in three Spanish grapevine producing regions. S. GIAMBRA¹, J. ARMENGOL², S. BURRUANO¹ and M. BERBEGAL². ¹Dipartimento SAF, Università degli Studi di Palermo, Viale delle Scienze, 4, 90128 Palermo, Italy. ²Instituto Agroforestal Mediterráneo, Universidad Politécnica de Valencia. Camino de Vera s/n 46022, Valencia, Spain. E-mail: mobermar@etsia.upv.es

The objective of this study was to identify species of Diatrypaceae associated with trunk diseases in three different Spanish grapevine producing regions: Albacete, Cádiz and Valencia provinces, located, respectively, in geographically distant areas of Central, South and Eastern Spain. Species identification of 71 isolates was performed using a combination of morphological characters and phylogenetic analyses based on the internal transcribed spacer regions of the rDNA (ITS) and the β -tubulin gene. Four species of Diatrypaceae were identified: *Cryptovalsa ampelina* was the predominant species (63.4%) followed by *Eutypa lata* (19.7%), *Eutypella microtheca* (4.2%), and *Eutypella citricola* (2.8%). Additionally, three taxa could not be identified at the species level; one (2.8%) was closely related to species such as *Diatrype stigma* or *Diatrypella iranensis* and two (1.4 and 5.6%) were closely related to species such as *Eutypa tetragona* or *Eutypa leptoplaca*, based on the phylogenetic analyses. The distribution of Diatrypaceae species differed between the three regions. *Cryptovalsa ampelina* was the prevalent species in Albacete and Valencia provinces, while *Eutypa lata* was the most frequently isolated species in Cádiz. This province showed the greatest species diversity, since all the species were isolated there except the putative new species closely related to *Diatrype stigma* or *Diatrypella iranensis*. This was found only in Valencia province. Possible relationships between the different species distributions and climatic conditions in the three regions are discussed.