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## **P19. Analysis of the symptom variability in the Vitaceae family after inoculation with fungi associated with grapevine trunk diseases**

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In recent years, vineyards have experienced a dramatic increase in grapevine trunk diseases that affect the viability of newly planted vineyards, limit the long-term sustainability of wine grape production and consequently lead to important losses in the majority of grapevine producing countries of the world. Since no effective curative control methods are known, proactive measures must be taken in grapevine nurseries. Accordingly, the main aim of this study was to investigate possible sources of resistance to Botryopsphaeriaceae, the principal ascomycetes associated with grapevine trunk diseases, in different genus and species within the Vitaceae family. Different species of the *Vitis*, *Ampelopsis*, *Cissus*, *Muscadinia* and *Parthenocissus* genera were inoculated with *Diplodia seriata* and *Neofusicoccum parvum*. The area of necrosis was measured eight days post inoculation using the ImageJ software. Preliminary results show difference in the susceptibility of different Vitaceae genera and species to *D. seriata* and *N. parvum* infections. All genotypes were more susceptible to *N. parvum* than *D. seriata*. Nevertheless, *Parthenocissus* revealed a low susceptibility to *N. parvum* in comparison with other genotypes tested. Subsequently, we plan to study defense mechanisms developed by the less susceptible genotypes and to identify genes that could be linked to resistance or tolerance. Use of these results will be useful in future programs for the selection of resistant varieties to grapevine trunk diseases, in order to improve production strategies for a sustainable viticulture.