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Título: Variation in Susceptibility to Downy Mildew Infection in Spanish Minority Vine Varieties.

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RESUMEN:
Downy mildew is one of the most destructive diseases affecting grapevines (*Vitis vinifera* L.). Caused by the oomycete *Plasmopara viticola* (Berk. and Curt.) Berl. and de Toni, it can appear anywhere where vines are cultivated. It is habitually controlled by the application of phytosanitary agents (copper-based or systemic) at different stages of the vine growth cycle. This, however, is costly, can lead to reduced yields, has a considerable environmental impact, and its overuse close to harvest can cause fermentation problems. All grapevines are susceptible to this disease, although the degree of susceptibility differs between varieties. Market demands and European legislation on viticulture and the use of phytosanitary agents (art. 14 of Directive 128/2009/EC) now make it important to know the sensitivity of all available varieties, including minority varieties. Such knowledge allows for a more appropriate use of phytosanitary agents, fosters the commercial use of these varieties and thus increases the offer of wines associated with different terroirs, and helps identify material for use in crop improvement programmes via crossing or genetic transformation, etc. Over 2020–2021, the susceptibility to *P. viticola* of 63 minority vine varieties from different regions of Spain was examined in the laboratory using the leaf disc technique. Some 87% of these varieties were highly susceptible and 11% moderately susceptible; just 2% showed low susceptibility. The least susceptible of all was the variety Morate (Madrid, IMIDRA). Those showing intermediate susceptibility included the varieties Sanguina (Castilla la Mancha, IVICAM), Planta Mula (Comunidad Valenciana, ITVE), Rayada Melonera (Madrid, IMIDRA), Zamarrica (Galicia, EVEGA), Cariñena Roja (Cataluña, INCAVI), Mandrègue (Aragón, DGA) and Bastardo Blanco (Extremadura, CICYTEX). The highly susceptible varieties could be differentiated into three subgroups depending on sporulation severity and density

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