

# Sprouting of paradormant and endodormant grapevine buds under conditions of forced growth: similarities and differences

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© 2018, Springer-Verlag GmbH Germany, part of Springer Nature. Main conclusion: Bud-break assays under forced growth conditions suggest that a drop in ABA content and an increase in sugars are common features in the sprouting of paradormant (PD) and endodormant (ED) grapevine buds. However, increases in cell division and in respiration are unique characteristics of the ED budding. In tropical and subtropical regions where the variations in day length and temperatures are minor throughout the year, the rupture of grapevine buds can be achieved during the current growing season given rise to a double-cropping system annually. However, it is unknown whether the breaking buds are in the paradormancy (PD) or endodormancy (ED) stage. In this study, we compared the breakage of PD and ED buds under conditions of forced growth. To do this, the expression of genes related to the metabolism of phytohormones and sugars, and of relevant physiological functions such as respiration and cell division