

***VvMYB60* EXPRESSION IS RESTRICTED TO GUARD CELLS AND CORRELATES WITH STOMATAL CONDUCTANCE IN THE GRAPE LEAF**

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Grapevine (*Vitis vinifera* L.) is traditionally grown under non-irrigated field conditions in many cropping environments, including dry lands and semiarid regions. Good osmotic adjustment, architecture of the root system, xylem embolism and efficient stomatal control of water loss account for the drought resistance traits of the *Vitis* genus. Among these features, the regulation of stomatal activity is of particular relevance, as it directly shapes the isohydric versus anisohydric behaviour of different grape species and cultivars.

Increasing evidence indicates a role for the transcriptional control of gene expression in modulating stomatal responses to both biotic and abiotic stimuli. R2R3 MYB transcription factors have been identified as key regulators of stomatal opening and transpirational water loss under stress in different plant species.

We identified the grape gene *VvMYB60* (VIT_08s0056g00800) as the functional ortholog of *AtMYB60* (At1g08810), involved in the regulation of stomatal activity in *Arabidopsis*. Here, we report results from the analysis of *VvMYB60* expression in the grape leaf, including:

1. The qPCR analyses of stomata-enriched grape epidermal fragments and laser-microdissected guard cells;
2. The confocal analysis of grape leaves agro-infiltrated with the *VvMYB60promoter::GFP* construct;
3. The analysis of changes in *VvMYB60* expression relatively to variations in stomatal conductance (g_s) in plants grown under control or drought stress conditions.

As a whole our data confirmed the guard cell-specificity of *VvMYB60* expression in the grape leaf and revealed a positive correlation between g_s and the relative abundance of the *VvMYB60* transcripts, thus substantiating the notion of *VvMYB60* being a transcriptional mediator of stomatal activity in grape.