

Supplemental Figure S1. Experimental design schematic. Top left panel shows the growing conditions under which grapevines were maintained during the experiment (i.e., air temperature (°C) and vapor pressure deficit (VPD) (MPa) (vertical axis) over time in days (horizontal axis)). Colors indicate different time periods during the experiment (Green: plant acclimation period to control greenhouse conditions, no stress treatment was applied. Yellow: period of reduced irrigation to maintain selected plants under drought stress (stomatal conductance = 75-100 mmol/m⁻²/s⁻¹). Red: period of increased temperature (>35 °C) to maintain selected plants under heat stress. Purple: Period of return to control conditions (i.e., all stress treatments have been removed) to induce plant physiological recovery. Labels ST0-ST6 refer to the sampling time points, where physiologic data (leaf temperature, stomatal conductance, and stem water potential), and plant leaves were collected for analysis. Asterix, indicate time points at which growing conditions were changed (i.e., * Control to Drought; ** Control to Heat and Drought to Heat+Drought; *** Stress to control). Top right panel describes the conditions the plants were in when samples were taken, and what plants were subjected to sampling. Bottom panel shows the number of plants kept under each condition during each of the four experimental periods.