

Description of Additional Supplementary Files

File name: Supplementary Data 1

Description: Summary statistics of genome sequencing and assembly of the eleven grape accessions.

File name: Supplementary Data 2

Description: Coordinates and features of the sex-linked SNPs.

File name: Supplementary Data 3

Description: Coordinates and features of the sex-linked INDELS.

File name: Supplementary Data 4

Description: Results of the marker assay performed on the F₁ population *Vv vinifera* F2-35 x *V. arizonica* b42-26.

File name: Supplementary Data 5

Description: Results of the marker assay performed on the F₁ population *Vv vinifera* 08326-61 x *Vv sylvestris* DVIT3351.27.

File name: Supplementary Data 6

Description: Sex-linked transcription factor-binding motifs within 3 kbp region upstream of transcription start sites of each gene composing the sex-determining locus.

File name: Supplementary Data 7

Description: Differential gene expression analysis of the genes within the sex-determining locus of *Vv vinifera* cv. Cabernet Sauvignon.

File name: Supplementary Data 8

Description: Differential gene expression analysis of the alleles within the sex-determining locus of *Vv sylvestris* DVIT3351.27.

File name: Supplementary Data 9

Description: Gene co-expression modules obtained from Weighted Gene Coexpression Network Analysis (WGCNA).

File name: Supplementary Data 10

Description: Summary of RNA-seq data features of floral buds collected from *Vv sylvestris* O34-16 (female), DVIT3351.27 (male) and *Vv vinifera* cv. Chardonnay at three developmental stages.