

Supplementary material of the manuscript published in *Vitis* **59**, 117–126 (2020):

### Using rootstocks to lower berry potassium concentrations in 'Cabernet Sauvignon' grapevines

ZEYU XIAO<sup>1), 2)</sup>, K. A. DEGARIS<sup>3)</sup>, T. BABY<sup>1)</sup>, S. J. MCLOUGHLIN<sup>4)</sup>, B. P. HOLZAPFEL<sup>1), 6)</sup>, R. R. WALKER<sup>1), 5)</sup>,  
L. M. SCHMIDTKE<sup>1), 2)</sup> and S. Y. ROGIERS<sup>1), 2), 6)</sup>

<sup>1)</sup>National Wine and Grape Industry Centre, Charles Sturt University, Wagga Wagga, Australia

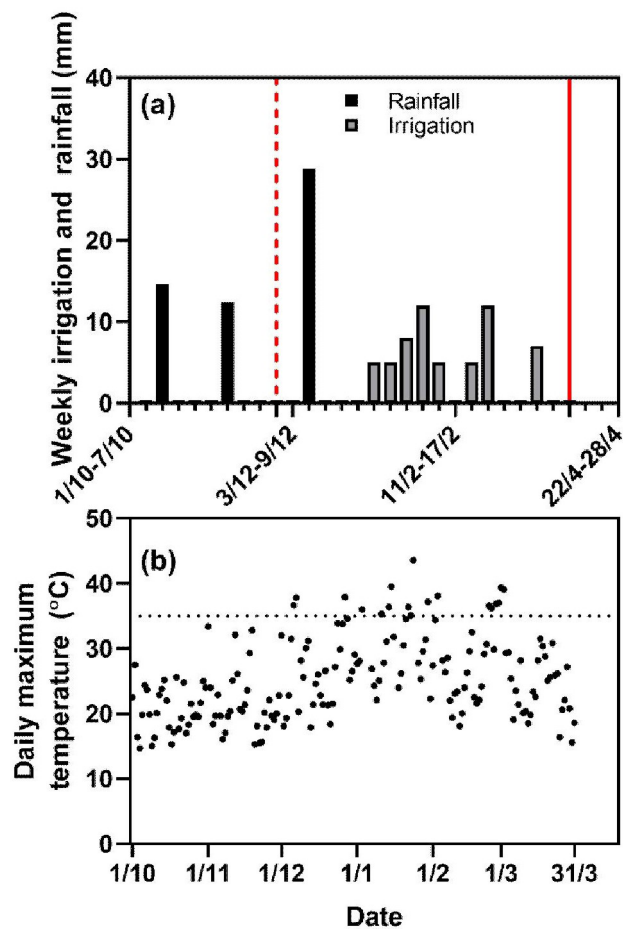
<sup>2)</sup>ARC Training Centre for Innovative Wine Production, The University of Adelaide, Glen Osmond, Australia

<sup>3)</sup>Limestone Coast Grape & Wine Council Inc., Coonawarra, Australia

<sup>4)</sup>Vinehealth Australia, Industry Offices, National Wine Centre, Adelaide, Australia

<sup>5)</sup>CSIRO Agriculture and Food, Waite Campus, Glen Osmond, Australia

<sup>6)</sup>NSW Department of Primary Industries, Wagga Wagga, Australia



Supplementary Fig. S1: Weekly water input, rainfall (> 10 mm daily) and irrigation, from 1<sup>st</sup> of October to harvest (2<sup>nd</sup> of April, indicated by solid red line) (a). Flowering week was indicated by dashed red line, harvest by solid red line. Daily maximum temperature (b). Dashed line indicates 35 °C.

## Supplementary Table S1

## Fertilizer application during growing season

Date	Product name	Nutrient	Application rate (L·ha <sup>-1</sup> )
18/10/2018	MaxiPhos Injecta 23	16 % N, 23 % P	46.28
13/11/2018	Bluestripe Magnesium Sulfate	6 % Mg	2.75
5/12/2018	ZnMnMATE	5 % Zn, 1 0% Mn	2.74

## Supplementary Table S2

[K], [Ca] and [Mg] at harvest in healthy rachises and those affected by BSN of 'Cabernet Sauvignon' on eight different rootstocks. Means are presented with standard error ( $n = 4$ ). Different lower case letters indicate statistical difference amongst rootstocks (One-way ANOVA,  $P < 0.05$ ). There was no rootstock effect on either healthy or BSN rachis [K] or [Mg]

Rootstock	Rachis [K] Healthy	Rachis [Ca] Healthy	Rachis [Mg] Healthy	Rachis [K] BSN	Rachis [Ca] BSN	Rachis [Mg] BSN
	(g·100 g <sup>-1</sup> dw)	(g·100g <sup>-1</sup> dw)	(mg·kg <sup>-1</sup> dw)	(g·100g <sup>-1</sup> dw)	(g·100g <sup>-1</sup> dw)	(mg·kg <sup>-1</sup> dw)
1103P	3.99 ± 0.12	0.36 ± 0.02 b	397 ± 8	3.85 ± 0.16	0.37 ± 0.02 bc	373 ± 25
110R	3.84 ± 0.23	0.40 ± 0.02 b	367 ± 40	4.28 ± 0.30	0.49 ± 0.01 ab	404 ± 41
140RU	3.85 ± 0.10	0.37 ± 0.01 b	406 ± 35	4.18 ± 0.18	0.43 ± 0.01 abc	440 ± 40
Börner	4.14 ± 0.10	0.54 ± 0.02 a	326 ± 35	3.80 ± 0.22	0.45 ± 0.02 abc	308 ± 22
M5512	3.64 ± 0.13	0.40 ± 0.01 b	325 ± 24	3.90 ± 0.25	0.51 ± 0.02 a	426 ± 28
M5489	3.47 ± 0.23	0.39 ± 0.02 b	301 ± 19	4.22 ± 0.20	0.53 ± 0.03 a	435 ± 43
Own	3.73 ± 0.06	0.38 ± 0.01 b	396 ± 14	3.60 ± 0.18	0.36 ± 0.03 c	445 ± 52
Ramsey	3.73 ± 0.09	0.36 ± 0.01 b	323 ± 17	3.96 ± 0.12	0.50 ± 0.05 a	495 ± 60