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Correction

Correction: Pinu et al. The Effect of Yeast Inoculation Methods on the Metabolite Composition of Sauvignon Blanc Wines. *Fermentation* 2023, *9*, 759

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There was a technical error in the calculation of yeast cell concentrations from cell numbers in the original publication [1].

Text Correction

We have now made corrections throughout the whole manuscript including abstract, methods (Sections 2.2.1, 2.3 and 2.4), results and discussion (Sections 3.3, 3.5 and 3.6) and conclusion.

In abstract: we modified the sentence "We also determined the effect of different numbers of yeast cells inoculation (varying from 1×10^6 to 1×10^{12} cells/mL) and successive inoculation on fermentation and end-product formation. The yeast inoculation method and number of cells significantly affected the fermentation time." to "We also determined the effect of different numbers of yeast cells inoculation (varying from 1×10^6 to 1×10^9 cells/mL) and successive inoculation on fermentation and end-product formation. The yeast inoculation method and different inoculation levels significantly affected the fermentation time".

In Section 2.2.1: we changed "cell numbers" to "cell concentrations".

In Section 2.3: we changed "1×10^{12}" to "1×10^9".

In Section 2.4: we changed the sentence "namely 1×10^8 ($n = 3$), 1×10^{10} ($n = 3$) and 1×10^{12} ($n = 3$) in the must" to "namely 1×10^7 ($n = 3$), 1×10^8 ($n = 3$) and 1×10^9 ($n = 3$) in the must".

In Section 3: we changed "yeast cell numbers" to "yeast inoculum size" in the first paragraph.

In Section 3.3: We changed "cell numbers" to "cell concentrations". We changed the sentence "we also investigated if inoculated yeast cell numbers had any impact on the metabolite composition of the resulting wines" to "we also investigated if different inoculation size had any impact on the metabolite composition of the resulting wines". We also changed this sentence "while other ferments were inoculated with higher cells numbers ranging from 10^8 to 10^{12} cells/mL" to "while other ferments were inoculated with higher concentration of cells ranging from 10^7 to 10^9 cells/mL".

In Section 3.5: We changed all "cell numbers" to "cell concentrations". We changed "cell numbers used as inoculum" to "cells used as inoculum" in the first paragraph, and changed "while cell numbers should also be considered" to "while inoculum size should also be considered" in the second paragraph.

In Section 3.6: we changed "cell numbers" to "cell concentrations" in the first paragraph.

check for updates

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In Conclusions: we changed the sentence "we provided some insights on how differences in inoculated cell numbers also affect the production of different classes of aroma compounds" to "we provided some insights on how differences in inoculum size also affect the production of different classes of aroma compounds".

Error in Figure and Legend

We have updated Figures 1 and 4–6 by correcting the cell concentrations: 1×10^8 to 1×10^7, 1×10^{10} to 1×10^8 and 1×10^{12} to 1×10^9. We changed "cell numbers" to "cell concentrations" in the caption of Figure 4. The corrected figures appear below.

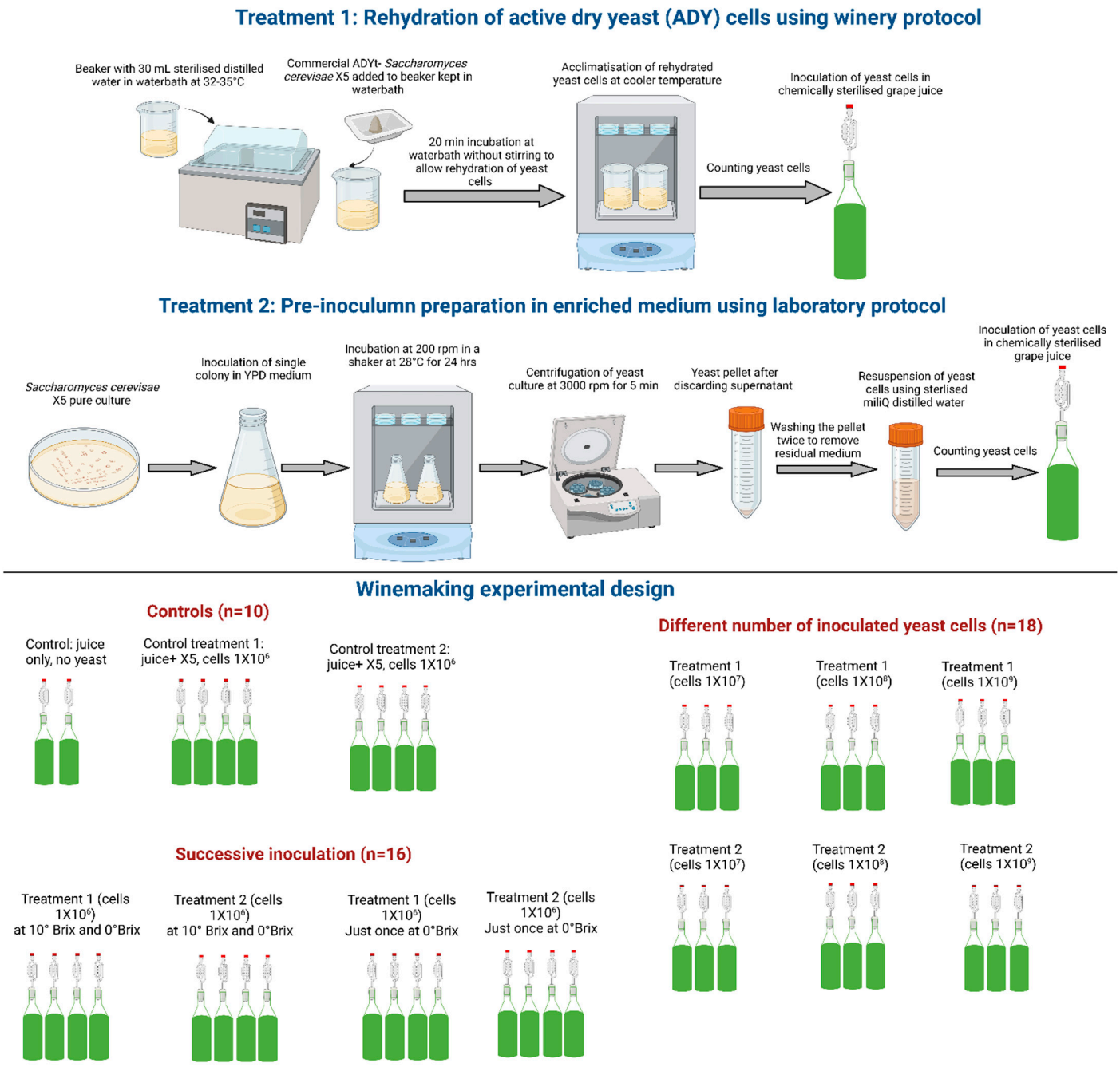

Figure 1. Two yeast inoculation preparation methods and winemaking experimental design used in this study. Yeast cells were counted as cells/mL in must.

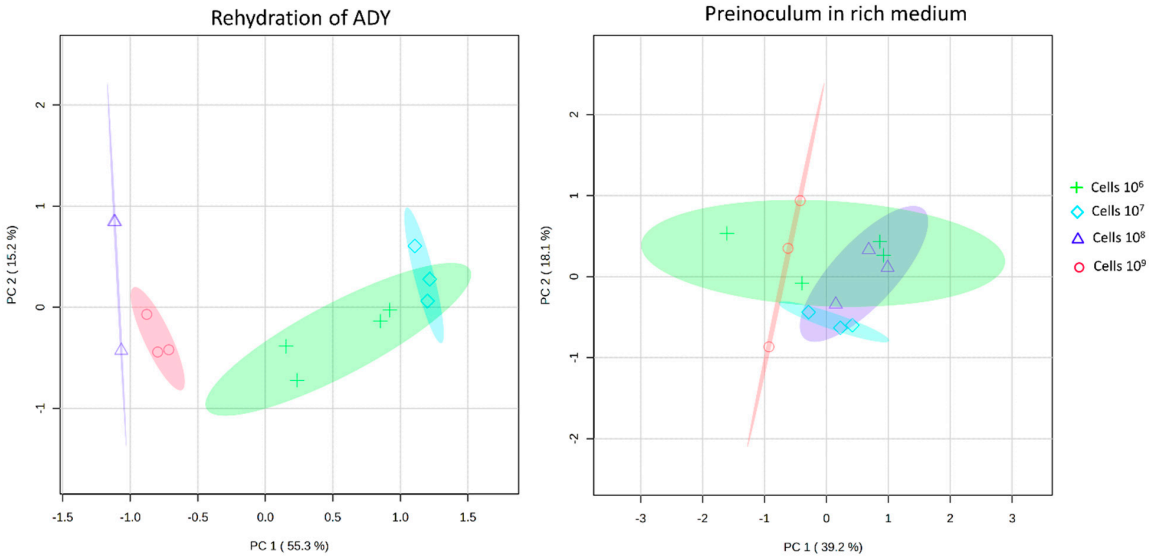

Figure 4. Two-dimensional projection of principal component analysis (PCA) score plots based on primary and secondary metabolites, showing the effect of inoculated cell concentrations during Sauvignon blanc fermentation by commercial *Saccharomyces cerevisiae* X5. ADY, active dry yeasts.

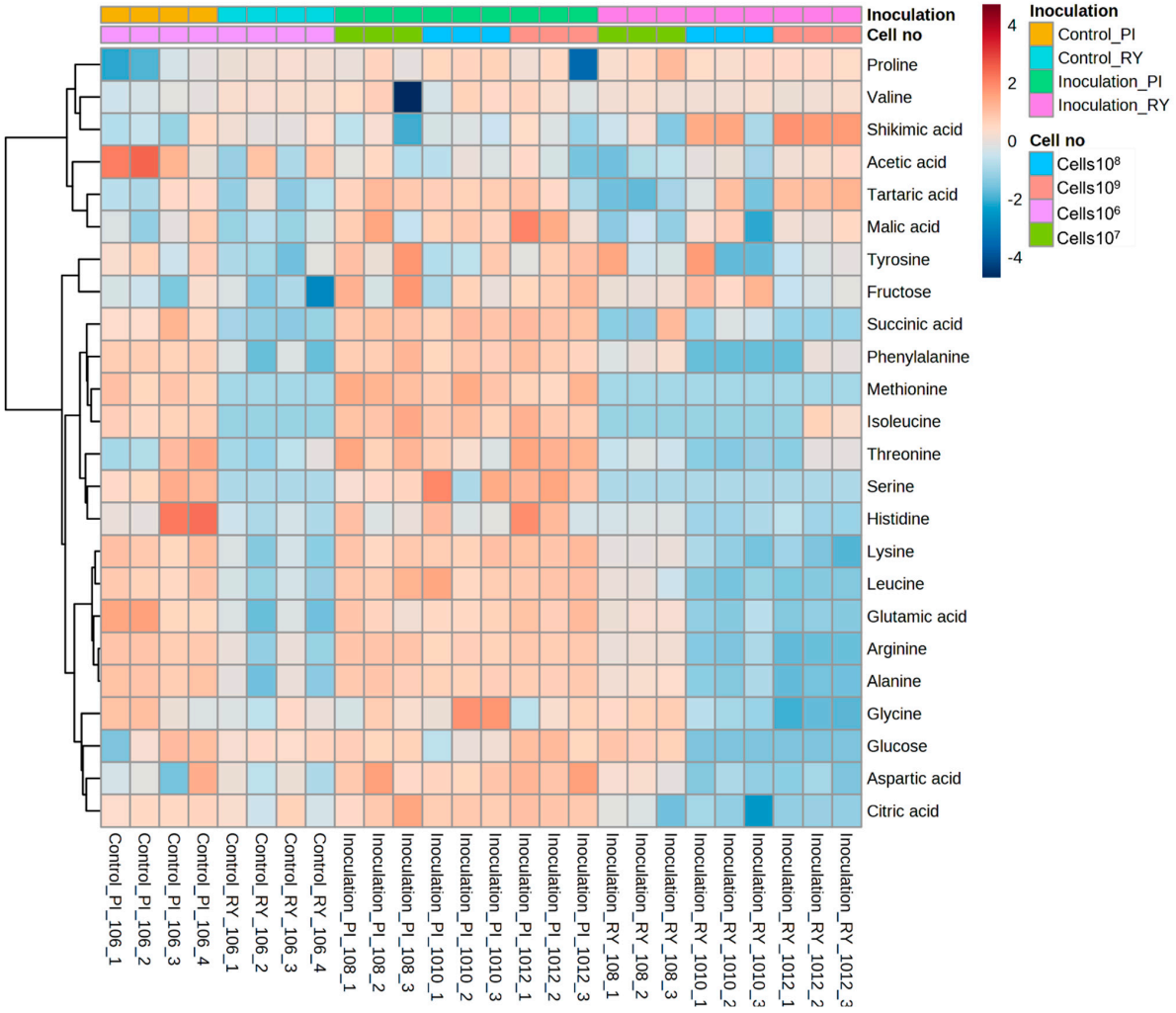

Figure 5. Heatmaps showing the concentrations of primary metabolites in different Sauvignon blanc wines produced by using commercial *Saccharomyces cerevisiae* X5. Two different inoculation methods

were used: pre-inoculum prepared in rich media (noted as PI), and rehydrated active dry yeasts (noted as RY). Inoculated cell concentrations (cells/mL) are also shown as: Cells 10^6 (control wines); Cells 10^7; Cells 10^8; Cells 10^9.

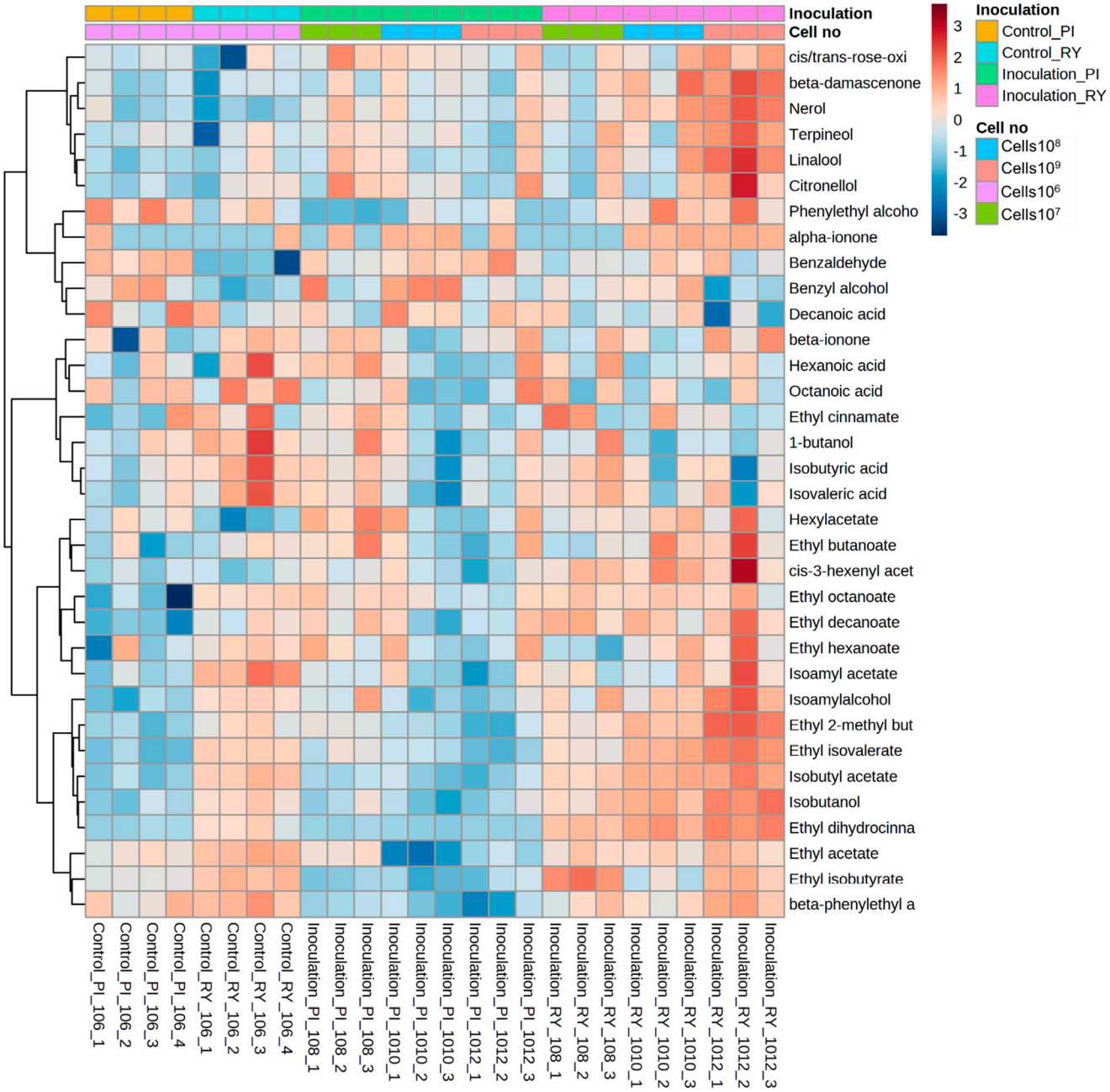

Figure 6. Heatmaps showing the concentrations of secondary metabolites in different Sauvignon blanc wines produced by using commercial *Saccharomyces cerevisiae* X5. Two different inoculation methods were used: pre-inoculum prepared in rich media (noted as PI), and rehydrated active dry yeasts (noted as RY)). Inoculated cell concentrations (cells/mL) are also shown as: Cells 10^6 (control wines); Cells 10^7; Cells 10^8; Cells 10^9.

Error in Table

Similarly, we also updated Tables 1, 2 and S1 by correcting the cell concentrations: 1×10^8 to 1×10^7, 1×10^{10} to 1×10^8 and 1×10^{12} to $1^1 \times 10^9$. In Table 1, the title of the second column was changed from "Inoculated Yeast Cells" to "Inoculated Yeast Cells (cells/mL)" and, also in the footnote, we corrected "cell numbers" to "cell concentrations".

In Table 2, the title of the second column was changed from "No of Inoculated Yeast Cells" to "Inoculated Yeast Cells (cells/mL)" and, also in the footnote, we corrected "cell numbers" to "cell concentration". In Table S1, we also made the following corrections: 10^7 to 10^6, 10^9 to 10^7, 10^{11} to 10^8, The corrected tables appear below.

Table 1. Fermentation completion time and basic oenological properties of all experimental wines.

Wine	Inoculated Yeast Cells (cells/mL)	Completion Time	Alcohol (%*v*/*v*)	pH	Titratable Acidity (g/L)	Glucose (g/L)	Fructose (g/L)	Total Residual Sugar (g/L)	Phenolics (mg Gallic Acid/L)
Rehydrated ADY									
Control RY	1×10^6	13	11.81 (0.01)	3.20 (0.01)	8.46 (0.13)	0.03 (0.01)	0.60 (0.28)	0.63 (0.27)	207.62 (6.50)
RY 1	1×10^7	12	11.76 (0.00)	3.21 (0.01)	8.41 (0.06)	0.05 (0.01)	1.09 (0.03) [a]	1.14 (0.03)	210.41 (3.38)
RY2	1×10^8	11	11.65 (0.01)	3.19 (0.01)	9.52 (0.17)	0.00	1.62 (0.32) [a]	1.62 (0.32)	201.19 (2.50)
RY3	1×10^9	11	11.64 (0.02)	3.19 (0.01)	9.51 (0.09)	0.00 [b]	0.87 (0.10) [b]	0.87 (0.10) [b]	204.95 (1.17)
SI RY 1	1×10^6, then 1×10^6 at 10 and 0 °Brix	14 *	11.86 (0.03)	3.28 (0.01)	8.48 (0.04)	0.00	0.04 (0.03) [a]	0.04 (0.03)	207.93 (4.47)
SI RY 2	1×10^6, then 1×10^6 at 0 °Brix	14 *	11.91 (0.00)	3.24 (0.01)	8.38 (0.11)	0.03 (0.04)	0.02 (0.02) [a]	0.05 (0.06)	211.37 (0.61)
Pre-inoculum									
Control PI	1×10^6	17	11.91 (0.02)	3.24 (0.02)	9.01 (0.16)	0.05 (0.05)	0.87 (0.28)	0.92 (0.28)	209.82 (3.55)
PI 1	1×10^7	16	11.80 (0.08)	3.20 (0.02)	8.68 (0.10)	0.04 (0.01)	1.73 (0.74)	1.77 (0.74)	212.81 (2.83)
PI 2	1×10^8	17	11.83 (0.03)	3.24 (0.02)	8.56 (0.13)	0.01 (0.01)	1.05 (0.37)	1.06 (0.37)	209.70 (2.80)
PI 3	1×10^9	16	11.79 (0.01)	3.19 (0.04)	8.41 (0.06)	0.08 (0.02) [b]	1.54 (0.24) [b]	1.62 (0.21) [b]	212.64 (4.27)
SI PI 1	1×10^6, then 1×10^6 at 10 and 0 °Brix	17 *	11.90 (0.00)	3.28 (0.02)	8.29 (0.04)	0.02 (0.00)	0.06 (0.02) [a]	0.08 (0.02)	212.04 (2.73)
SI PI 2	1×10^6, then 1×10^6 at 0 °Brix	17 *	11.92 (0.01)	3.26 (0.02)	8.29 (0.10)	0.02 (0.00)	0.02 (0.01) [a]	0.04 (0.01)	206.93 (4.61)

Here, ADY, active dry yeast; RY, rehydrated yeast; SI, successive inoculation; PI, pre-inoculum. * denotes the ferments whose fermentation was not stopped although the residual sugar was below 2 g/L. [a] indicates the statistically significant differences in comparison to control ($p < 0.05$); [b] indicates the statistical differences between RY and PI when comparison was made with the same inoculated cell concentrations.

Table 2. Three major varietal thiols in Sauvignon blanc wines made after different yeast fermentations.

Wine	Inoculated Yeast Cells (cells/mL)	3MH (ng/L)	3MHA (ng/L)	4MMP (ng/L)
Inoculation of rehydrated ADY				
Control RY	1×10^6	*11,498* (*2717*)	3242 (843)	*62* (*41*)
RY 1	1×10^7	*12,657* (*1414*) [a]	3197 (250)	*69* (*14*)
RY2	1×10^8	14,217 (829) [b]	3146 (175)	*105* (*15*) [a]
RY3	1×10^9	14,066 (742) [b]	2943 (77)	*157* (*59*) [b]
SI RY 1	1×10^6, then 1×10^6 at 10 and 0 °Brix	13,947 (1210) [a]	3588 (492)	29 (5) [b]
SI RY 2	1×10^6, then 1×10^6 at 0 °Brix	14,626 (636) [b]	*4037* (*131*) [a]	27 (9) [b]

Table 2. *Cont.*

Wine	Inoculated Yeast Cells (cells/mL)	3MH (ng/L)	3MHA (ng/L)	4MMP (ng/L)
		Inoculation of pre-inoculum		
Control PI	1×10^6	*14,382* (*802*)	3147 (335)	*20* (*8*)
PI 1	1×10^7	*15,573* (*596*) [a]	3131 (216)	*25* (*2*)
PI 2	1×10^8	14,502 (2010)	3095 (301)	*21* (*8*)
PI 3	1×10^9	15,914 (692) [a]	3078 (117)	*38* (*8*) [b]
SI PI 1	1×10^6, then 1×10^6 at 10 and 0 °Brix	13,879 (2846)	3091 (522)	17 (5)
SI PI 2	1×10^6, then 1×10^6 at 0 °Brix	15,679 (859) [a]	*3382* (*305*)	24 (4)

p-values are shown as superscripts that were calculated by comparing with respective control wines; [a] < 0.05 and [b] < 0.01. ADY, active dry yeast; RY, rehydrated yeast; SI, successive inoculation; PI, pre-inoculum; 3MH, 3-mercaptohexanol; 3MHA, 3-mercaptohexylacetate; 4MMP, 4-methyl-4-mercaptopentan-2-one. Standard deviations of replicates in each treatment and control wines are shown within brackets. Numbers shown in italics indicate the statistical differences when comparison was made between RY and PI with same inoculated cell concentration (RY vs. PI).

Table S1. Viability testing carried out for each ferments and treatments using Neubauer hemocytometer and methylene blue (0.1%) dye.

Wine	Approximate Total Cell Concentration/mL	Approximate Viable Cell Concentration/mL	% of Viable Cells
	Rehydrated ADY		
Control RY	1×10^6	7.5×10^5	75
RY 1	1×10^7	7.4×10^6	74
RY2	1×10^8	7.4×10^7	74
RY3	1×10^9	7.6×10^8	76
SI RY 1	1×10^6, then 1×10^6 at 10 and 0 °Brix	7.3×10^5; 7.0×10^5; 6.3×10^5	73%, 70%, 63%
SI RY 2	1×10^6, then 1×10^6 at 0 °Brix	7.3×10^5; 6.0×10^5	73%, 60%
	Pre-Inoculum		
Control PI	1×10^6	7.4×10^5	74
PI 1	1×10^7	7.51×10^6	75
PI 2	1×10^8	7.4×10^7	74
PI 3	1×10^9	7.6×10^9	76
SI PI 1	1×10^6, then 1×10^6 at 10 and 0 °Brix	7.4×10^5; 7.1×10^5; 6.2×10^5	74%, 71%, 62%
SI PI 2	1×10^6, then 1×10^6 at 0 °Brix	7.5×10^5; 61×10^5	75%, 61%

The authors state that the scientific conclusions are unaffected. This correction was approved by the Academic Editor. The original publication has also been updated.

Reference

1. Pinu, F.R.; Stuart, L.; Topal, T.; Albright, A.; Martin, D.; Grose, C. The Effect of Yeast Inoculation Methods on the Metabolite Composition of Sauvignon Blanc Wines. *Fermentation* **2023**, *9*, 759. [CrossRef]