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%

Table S2. Odor Activity Value (OAV) of aroma compounds quantified in wines. RY= Rehydrated active dry yeast and PI= pre-inoculum prepared in rich medium.

Treatment	Control_RY	Control_PI	Inoculation_RY_1	Inoculation_PI_1	Inoculation_RY_2	Inoculation_PI_2	Inoculation_RY_3	Inoculation_PI_3
Type of yeast inoculation	RY	PI	RY	PI	RY	PI	RY	PI
Cells	10^6	10^6	10^8	10^8	10^{10}	10^{10}	10^{12}	10^{12}
Isobutanol	0	0	0	0	1	0	1	0
1-butanol	0	0	0	0	0	0	0	0
Isoamylalcohol	3	3	3	3	3	3	4	3
Benzaldehyde	0	0	0	0	0	0	0	0
Benzyl alcohol	0	0	0	0	0	0	0	0
Phenylethyl alcohol	28	35	26	21	33	26	34	26
beta-damascenone	83	84	99	94	132	102	165	93
alpha-ionone	1	1	0	2	6	6	6	2
beta-ionone	30	23	27	31	24	21	36	30
cis/trans-rose-oxide	0	0	0	0	0	0	0	0
Linalool	2	2	3	3	3	2	4	2
Terpineol	0	0	0	0	0	0	0	0
Citronellol	0	0	0	0	0	0	0	0
Nerol	0	0	0	0	0	0	0	0
Ethyl dihydrocinnamate	0	0	0	0	0	0	0	0
Ethyl cinnamate	1	1	1	1	1	1	1	1
Ethyl isobutyrate	1	0	1	0	0	0	1	0
Ethyl butanoate	20	18	19	23	23	19	23	20
Ethyl 2-methyl butanoate	0	0	0	0	1	0	1	0
Ethyl isovalerate	0	0	0	0	0	0	1	0
Ethyl hexanoate	24	22	21	24	24	23	25	23
Ethyl octanoate	22	14	23	22	23	21	22	20
Ethyl decanoate	25	17	30	27	28	21	32	24
Ethyl acetate	4	3	3	3	3	2	4	3
Isobutyl acetate	0	0	0	0	0	0	0	0
Isoamyl acetate	123	90	100	97	103	95	117	89
Hexylacetate	1	1	1	1	1	1	1	1
cis-3-hexenyl acetate	0	0	0	0	0	0	0	0
beta-phenylethyl acetate	1	1	1	1	1	1	1	1
Isobutyric acid	5	3	4	4	3	3	3	4
Isovaleric acid	3052	2258	2785	2732	2331	1892	2377	2412
Hexanoic acid	8	7	8	9	7	7	7	7
Octanoic acid	18	17	17	16	16	16	16	17
Decanoic acid	4	4	4	4	4	4	3	4
3MH	203	218	221	239	254	220	248	253
3MHA	807	789	794	828	788	738	783	750
4MMP	31	49	48	63	70	91	66	166