

Supplementary Table S1. Mean concentration (n=3) \pm standard deviation of the main quality control parameters of wines at the end of the fermentation in Gewürztraminer. Data are compared with ANOVA followed by Tukey HSD multiple comparison ($p < 0.05$). Different letters indicate values statistically differentiated.

	SC	S.24	S.48	C80	C98	S.100
Ethanol (% vol)	13.19 \pm 0.06 ^a	13.27 \pm 0.05 ^a	13.28 \pm 0.3 ^a	13.18 \pm 0.01 ^a	13.15 \pm 0.12 ^a	13.51 \pm 0.05 ^a
Glucose+Fructose (g/L)	1.56 \pm 1.35 ^a	3.83 \pm 0.93 ^a	3.71 \pm 5.31 ^a	4.05 \pm 0.89 ^a	6.72 \pm 2.39 ^a	4.64 \pm 1.61 ^a
pH	3.39 \pm 0.01 ^b	3.42 \pm 0 ^b	3.41 \pm 0.02 ^b	3.40 \pm 0.01 ^b	3.41 \pm 0.01 ^b	3.55 \pm 0.01 ^a
Titrate acidity (g/L)	4.91 \pm 0.3 ^a	4.04 \pm 0.06 ^c	3.97 \pm 0.04 ^c	4.23 \pm 0.03 ^{bc}	4.06 \pm 0.25 ^c	4.68 \pm 0.07 ^{ab}
Volatile acidity (g/L)	0.58 \pm 0.03 ^{ab}	0.62 \pm 0.02 ^a	0.48 \pm 0.06 ^b	0.58 \pm 0.02 ^{ab}	0.53 \pm 0.05 ^{ab}	0.52 \pm 0.07 ^{ab}
Total dry extract (g/L)	24.8 \pm 2.2 ^a	24.2 \pm 0.8 ^a	24.2 \pm 4.6 ^a	24.9 \pm 0.6 ^a	27.1 \pm 2.5 ^a	27.6 \pm 1.4 ^a
Malic acid (g/L)	1.24 \pm 0.07 ^a	0.97 \pm 0.08 ^b	0.99 \pm 0.05 ^b	1.01 \pm 0.03 ^b	0.99 \pm 0.12 ^b	1.07 \pm 0.02 ^{ab}
Lactic acid (g/L)	0.57 \pm 0.72 ^a	0.01 \pm 0.01 ^a	0.08 \pm 0.09 ^a	0.08 \pm 0.07 ^a	0.03 \pm 0.04 ^a	0.13 \pm 0.04 ^a
Tartaric acid (g/L)	1.53 \pm 0.01 ^c	1.64 \pm 0.01 ^{bc}	1.71 \pm 0.08 ^b	1.62 \pm 0.07 ^{bc}	1.73 \pm 0.05 ^b	3.05 \pm 0.08 ^a
Ashes (g/L)	1.72 \pm 0.19 ^b	1.75 \pm 0.03 ^b	1.80 \pm 0.16 ^b	1.75 \pm 0.05 ^b	1.88 \pm 0.06 ^b	2.67 \pm 0.01 ^a
Glycerol (g/L)	9.18 \pm 0.1 ^a	7.92 \pm 0.2 ^{bc}	7.31 \pm 0.18 ^{cd}	8.26 \pm 0.09 ^b	7.73 \pm 0.49 ^{bcd}	7.17 \pm 0.19 ^d
Potassium (g/L)	0.63 \pm 0.2 ^b	0.47 \pm 0.02 ^b	0.53 \pm 0.04 ^b	0.51 \pm 0.04 ^b	0.54 \pm 0.05 ^b	1.07 \pm 0.02 ^a

Supplementary Table S2. Volatile compounds analyzed at the end of the alcoholic fermentation in Gewürztraminer wines. Values are means of three replicates \pm SD. Data are analyzed with one-way Anova followed by HSD Tukey's test. Different superscript letters denote significant difference ($P < 0.05$) among yeast treatments within the same grape variety.

		Gewürztraminer					
	Compounds (μ g/L)	SC	S.24	S.48	C80	C98	S.100
Acetates	2-phenylethyl acetate	682.03 \pm 55.44 ^c	3598.56 \pm 225.85 ^a	3374.93 \pm 362.85 ^a	2634.1 \pm 296.72 ^b	3582.93 \pm 53.79 ^a	3326.26 \pm 345.44 ^{ab}
	ethylphenyl acetate	0.76 \pm 0.05 ^a	0.36 \pm 0.05 ^{bc}	0.2 \pm 0 ^c	0.43 \pm 0.05 ^b	0.3 \pm 0.1 ^{bc}	0.36 \pm 0.05 ^{bc}
	isobutyl acetate	3.74 \pm 0.21 ^{ab}	2.48 \pm 0.51 ^{bc}	1.55 \pm 0.34 ^c	4.61 \pm 0.26 ^a	2.23 \pm 1.1 ^c	4.2 \pm 0 ^a
	isopentyl acetate	4124.83 \pm 337.19 ^{ab}	3268.8 \pm 569.98 ^b	2412.96 \pm 713.16 ^b	5254.8 \pm 268.08 ^a	3274.53 \pm 1251.69 ^b	338.26 \pm 4.4 ^c
	n-butyl acetate	102.4 \pm 7.1 ^{ab}	76.83 \pm 12.74 ^{bc}	54.83 \pm 16.18 ^c	129.13 \pm 7.57 ^a	75.83 \pm 28.34 ^{bc}	92.33 \pm 5.48 ^{abc}
	n-hexyl acetate	51.23 \pm 1.67 ^a	41.66 \pm 7.64 ^a	48.16 \pm 6.92 ^a	44.06 \pm 3.09 ^a	46.23 \pm 8.72 ^a	37.9 \pm 0.49 ^a
Alcohols	1-hexanol	845.1 \pm 24.1 ^d	1474.53 \pm 127.23 ^{bc}	1743.16 \pm 193.37 ^{ab}	1130.9 \pm 54.92 ^{cd}	1473.73 \pm 213.69 ^{bc}	2011.23 \pm 56.34 ^a
	3-methylthio-1-propanol	992.2 \pm 29.23 ^a	532.8 \pm 47.18 ^b	504.56 \pm 35.76 ^{bc}	461.83 \pm 5.68 ^{bc}	437.5 \pm 33.65 ^c	481.36 \pm 9.25 ^{bc}
	2-phenyl ethanol	28919.36 \pm 2217.29 ^a	9409.33 \pm 456.51 ^{bc}	8366.46 \pm 417.25 ^c	12237.53 \pm 1043.53 ^b	8885.56 \pm 1008.67 ^c	9250.83 \pm 644.75 ^{bc}

<i>Ethyl esters</i>	benzyl alcohol	20.9±2.48b	29.5±0.78a	29.73±0.4a	27.23±0.35ab	27.83±0.77ab	29.83±7.01a
	cis-3-hexen-1-ol	14.33±0.4c	17.76±0.37ab	19.53±1.11a	16.13±0.47bc	18.03±1.52ab	20.13±0.92a
	trans-3-hexen-1-ol	23.83±1.64b	26.03±1.7ab	29.13±1.15a	24.7±1.04b	26.7±1.73ab	28.7±0.52a
	diethyl succinate	15.26±1.8a	8.66±1.1b	5.53±1.1b	15.3±3.68a	7.36±1.42b	7.73±0.8b
	ethyl-2-methylbutyrate	0.43±0.05a	0.2±0c	0.2±0c	0.23±0.05bc	0.16±0.05c	0.33±0.05ab
	ethyl butyrate	172.13±3.11a	107.43±12.85b	98.2±20.1b	164.03±10.15a	101.5±15.51b	125.26±36.98ab
	ethyl decanoate	229.53±41.45bc	628.56±147.3ab	464.46±110.56abc	659.83±202.13ab	775.7±354.73a	122.56±15.96c
	ethyl dodecanoate	25.16±6.27b	44.46±7.01ab	30.8±3.64b	55.53±20.88ab	69.83±19.24a	38.46±7.22ab
	ethyl hexanoate	513.26±30.4a	145.13±10.68cd	150.73±10.58cd	257.73±32.65b	184.13±21.49c	98.93±4.09d
	ethyl isovalerate	3.6±0.45a	3±0.72a	3.73±0.9a	4.53±0.35a	3.53±0.51a	3.86±0.15a
	ethyl lactate	392.6±13.77a	261.03±27.91b	183.43±16.33c	406.83±36.56a	222.56±38.72bc	238.46±15.78bc
<i>Fatty acids</i>	ethyl octanoate	349.76±25.67a	84±4.56c	86.73±25.82c	199.46±69.22b	84.6±10.97c	35.86±6.63c
	methyl salicilate	0.23±0.05a	0.3±0a	0.23±0.05a	0.23±0.05a	0.3±0a	0.4±0.17a
	butanoic acid	408.76±1.69a	208.06±16.76c	210.6±14.32c	290.96±25.31b	211.66±16.67c	248.46±10.2bc
	decanoic acid	1042±40.16b	1848.1±312.87ab	1993.4±595.56ab	1583.03±194.21b	3029.8±1029.11a	1640.16±67.41ab
	hexanoic acid	1732.7±37.85a	489.2±59.28c	410.1±71.88c	898.86±106.72c	504.03±79.35b	340.36±22.07c
	isobutyric acid	128.7±9a	79.46±7.48bc	79.63±9bc	94.8±1.57b	78.73±4.21bc	67.26±5.31c
	isovaleric acid	315.36±22.66a	132.6±8.91b	122.7±5.98bc	159.3±15.32b	134.36±8.68b	88.53±17.66c
	nonanoic acid	4.83±0.66a	5.03±0.64a	5.03±0.4a	4.9±0.55a	4.93±0.2a	3.23±0.2b
	octanoic acid	2694.1±38.45a	684.5±96.4cd	667.03±100.16cd	1318.73±241.64b	880.4±84.21c	475.93±31.47d
	valeric acid	19.3±1.65a	12.13±1.12cd	11.9±1.03cd	14.73±0.64b	12.4±0.79c	8.4±0.2d
	alpha terpineol	3.2±0.62b	4.76±0.46a	4.5±0.52ab	4.8±0.17a	5.5±0.55a	3.33±0.51b
<i>Free Terpenes</i>	beta citronellol	19.83±0.92a	23.6±4.76a	17.83±1.61a	19.33±4.85a	22.33±3.62a	19.16±0.41a
	geranic acid	15.06±0.77c	17.9±2.48c	18.73±2.77bc	19.26±0.75bc	23.63±2.87ab	26.46±1.59a
	geraniol	58.63±3.81b	71.76±3.71ab	67.3±7.6ab	80.93±5.33a	70.06±8.64ab	73.63±6.3ab
	linalol oxide A	3.86±0.45a	3.06±0.35ab	3.03±0.4ab	3.33±0.3ab	3.06±0.05ab	2.66±0.35b
	linalol oxide B	2.53±0.55a	2.96±0.5a	3.26±0.15a	2.36±0.35a	2.83±0.2a	2.73±0.23a
	linalool	5.36±0.25c	6.93±0.61bc	6.83±0.83bc	7.8±0.6ab	8.1±0.5ab	8.93±0.86a
	nerol	2±0.08a	2.27±0.21a	2.4±0.05a	2.04±0.18a	2.2±0.39a	2.13±0.11a
	rose oxide I	0.4±0a	0.4±0a	0.4±0a	0.4±0a	0.43±0.05a	0.46±0.05a
	rose oxide II	0.43±0.05a	0.43±0.05a	0.4±0.1a	0.4±0a	0.4±0a	0.4±0a
	terpinen 4 ol	1.33±0.15b	3.03±0.76ab	2.3±0.5ab	3.23±0.9ab	4±2.16ab	4.4±0.09a

<i>Others</i>	benzaldehyde	1.93±0.15b	2.03±0.05b	1.76±0.2b	2.03±0.05b	2.3±0.43ab	2.76±0.4a
	benzothiazole	1.63±0.28a	1.16±0.11a	1.33±0.32a	1.06±0.2a	1.23±0.41a	1.2±0.2b
	beta damascenone	1.46±0.11a	1.1±0.09ab	0.96±0.2b	1.43±0.05a	1.13±0.15ab	0.96±0.15b
	beta damascone	30.9±2.49ab	24.46±2.4abc	19.13±1.62c	32.83±5.26a	24.06±3.47bc	21.8±1.65c
	guaiacol	2.86±0.96a	2.5±0.45a	2.06±0.32a	2.36±0.5a	1.96±0.3a	2.76±0.11a
	zingerone	4.13±0.15a	1.7±0.09b	2.2±0.62b	1.9±0.2b	1.96±0.47b	2.53±1.02b
