

Adapting Polarized Projective Mapping to Investigate Fruitiness Aroma Perception of White Wines from Oregon

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Table S1. Wine chemical analysis.

Wines	Residual sugars (g/L)	TA (g/L H ₂ T)	pH	Ethanol (%v/v)	Acetic acid (g/L)	Malic acid (g/L)	Total SO ₂ (mg/L)
C1	0.49±0 ^{mn}	4.84±0.06 ^j	3.40±0.01 ^{bc}	14.91±0.01 ^k	0.62±0.02 ^a	0.07±0.01 ^o	74.26±1.62 ^c
C2	2.42±0.04 ^j	5.16±0.02 ^{hj}	3.48±0 ^{ab}	14.79±0.02 ^h	0.36±0.01 ^{cd}	1.15±0.01 ^h	71.89±1.2 ^c
C3	7.46±0.01 ^b	5.73±0.02 ^e	3.1±0 ^{hij}	14.60±0.01 ⁱ	0.18±0.01 ^{hi}	1.65±0 ^c	36.16±4.89 ^{hi}
C4	1.23±0.21 ^{kl}	5.07±0.06 ⁱ	3.14±0.01 ^{fgh}	14.57±0.02 ^e	0.32±0.01 ^{de}	0.34±0.01 ^m	55.47±4.46 ^d
C5	3.605±0.03 ^{fg}	5.37±0.12 ^{gh}	3.38±0.01 ^{bc}	13.93±0.02 ^g	0.16±0 ^{ijk}	1.6±0 ^d	48±1.85 ^{de}
C6	1.62±0.06 ^k	5.73±0.06 ^e	3.09±0 ^{hij}	13.92±0.01 ^d	0.38±0 ^c	0.38±0.01 ^l	44.53±0 ^{efg}
C7	0.89±0.01 ^{lm}	5.15±0.06 ^{hi}	3.22±0 ^{ef}	13.86±0.01 ^e	0.32±0.01 ^e	0.23±0 ⁿ	37.87±2.81 ^{ghi}
P1	3.28±0.11 ^{ghi}	7.23±0.12 ^a	2.84±0.08 ^k	13.83±0.01 ^f	0.32±0.01 ^e	2.29±0.01 ^a	109.33±0.92 ^b
P2	3.14±0.11 ^{hi}	5.83±0.06 ^{de}	3.12±0 ^{fghi}	13.67±0.02 ^d	0.27±0.02 ^f	1.53±0.01 ^e	45.33±2.44 ^{efg}
P3	4.03±0.03 ^f	5.63±0.06 ^{ef}	3.03±0 ^{ij}	13.66±0.03 ^l	0.18±0 ^{hi}	1.56±0 ^{de}	31.47±3.78 ^{ij}
P4	3.45±0.04 ^{gh}	5.7±0 ^{ef}	3.11±0 ^{ghi}	13.64±0.01 ^g	0.18±0 ^{hi}	0.01 ^j	23.73±3.23 ^k
P5	2.92±0.1 ⁱ	5.27±0.06 ^{hi}	3.09±0 ^{hij}	13.52±0.02 ^f	0.21±0 ^{gh}	0.96±0 ^j	45.6±0.8 ^{ef}
P6	9.52±0.33 ^a	6.03±0.06 ^{cd}	3.01±0.01 ⁱ	13.5±0.02 ^j	0.11±0 ^l	1.44±0.01 ^f	26.67±1.85 ^{jk}
P7	6.49±0.11 ^c	7±0 ^b	2.89±0.12 ^k	13.36±0.01 ^l	0.13±0 ^{kl}	1.8±0.01 ^b	35.2±3.2 ^{hi}
V1	2.89±0.02 ⁱ	4.43±0.12 ^k	3.25±0.01 ^{de}	13.33±0.02 ^h	0.12±0 ^l	1.05±0.01 ⁱ	23.73±2.01 ^k
V2	4.48±0.05 ^e	5.73±0.15 ^e	3.48±0 ^{ab}	13.27±0.02 ^f	0.13±0.01 ^{kl}	0.55±0 ^k	40.27±0.46 ^{fgh}
V3	0.77±0.02 ^m	4.07±0.06 ^l	3.4±0 ^{bc}	13.26±0.02 ⁱ	0.14±0.01 ^{jkl}	1.14±0 ^h	51.73±2.44 ^{de}
V4	5.01±0.06 ^d	6.1±0 ^c	3.21±0.01 ^{efg}	13.17±0.02 ^c	0.17±0 ^{ij}	0.04±0.01 ^{op}	51.73±2.44 ^{de}
V5	0.31±0.01 ⁿ	5.5±0 ^{fg}	3.26±0.01 ^{de}	12.94±0.05 ^b	0.37±0.02 ^c	0.01±0.01 ^p	21.6±1.6 ^k
V6	6.41±0.11 ^c	4.47±0.12 ^k	3.52±0.02 ^a	12.86±0.02 ^a	0.22±0 ^g	1.37±0.01 ^g	150.57±0.13 ^a
V7	4.54±0.11 ^e	5.20±0 ^{hi}	3.33±0 ^{cd}	12.81±0.01 ^c	0.51±0 ^b	1.05±0.02 ⁱ	113.07±1.85 ^b

Statistically significant differences ($P < 0.05$) between treatments using Tukey's HSD are indicated by different letters.

Table S2. Frequency table of the aroma descriptors elicited by the wine experts panel in the UFP procedure.

Wines	Tropical fruit	Stone fruit	Citrus	Pome	Floral	Confectionary	Vegetal	Oaky	Volatile	Spoilage
C1	2	1	1	1	1	4	0	2	3	1
C2	3	2	3	3	0	3	2	2	2	1
C3	3	5	4	2	1	0	1	1	0	2
C4	1	3	4	1	3	2	3	2	1	2
C5	5	2	5	2	1	1	1	0	0	1
C6	0	4	4	1	1	2	2	6	0	0
C7	2	3	4	4	2	1	1	2	0	1
P1	2	2	7	3	1	2	3	0	3	1
P2	4	0	4	2	1	2	2	2	0	1
P3	4	4	5	1	1	0	3	0	2	2
P4	5	4	6	2	2	1	2	1	1	0
P5	4	4	3	5	4	2	1	0	1	1
P6	2	2	3	1	3	1	5	0	0	3
P7	1	0	5	3	5	0	3	0	1	2
V1	3	2	6	3	1	0	1	0	1	0
V2	5	5	4	2	4	1	2	0	0	0
V3	6	2	5	4	2	2	1	0	1	0
V4	5	2	6	2	1	1	2	2	0	2
V5	3	0	1	1	0	3	4	1	3	4
V6	7	4	4	3	1	1	2	0	0	2
V7	1	2	7	1	1	1	2	2	3	2

Table S3. Frequency table of the aroma descriptors elicited by the trained consumers panel in the UFP procedure.

Wines	Tropical fruit	Stone fruit	Citrus	Pome	Melon	Berry	Floral	Confectionary	Vegetal	Oaky	Volatile	Faint
C1	2	2	6	4	0	5	0	3	1	4	1	0
C2	2	1	2	3	0	4	1	4	1	2	5	1
C3	3	1	6	4	1	0	2	0	0	2	1	1
C4	0	3	3	3	1	3	1	1	2	4	4	0
C5	4	1	6	3	0	0	1	0	2	4	1	1
C6	0	0	2	2	2	4	0	5	1	4	0	2
C7	1	2	2	3	1	1	0	3	1	5	1	1
P1	1	2	6	4	1	5	4	2	1	2	2	2
P2	4	3	4	1	0	2	2	3	1	0	0	2
P3	1	4	8	2	2	0	1	2	1	2	3	0
P4	3	3	4	4	1	4	1	2	1	2	1	3
P5	5	2	4	2	2	1	2	3	1	0	2	0
P6	3	2	3	2	0	3	4	4	1	1	1	0
P7	2	3	4	4	1	1	4	0	2	2	1	0
V1	3	1	9	1	2	2	1	1	1	2	2	5
V2	4	4	4	2	0	0	3	2	3	1	0	0
V3	6	5	4	1	2	5	2	2	1	0	0	1
V4	2	6	2	2	2	3	1	3	0	0	0	0
V5	0	0	3	1	0	2	1	1	0	2	5	0
V6	3	4	6	1	2	3	2	2	4	1	2	2
V7	3	2	1	0	2	1	0	0	3	4	4	1

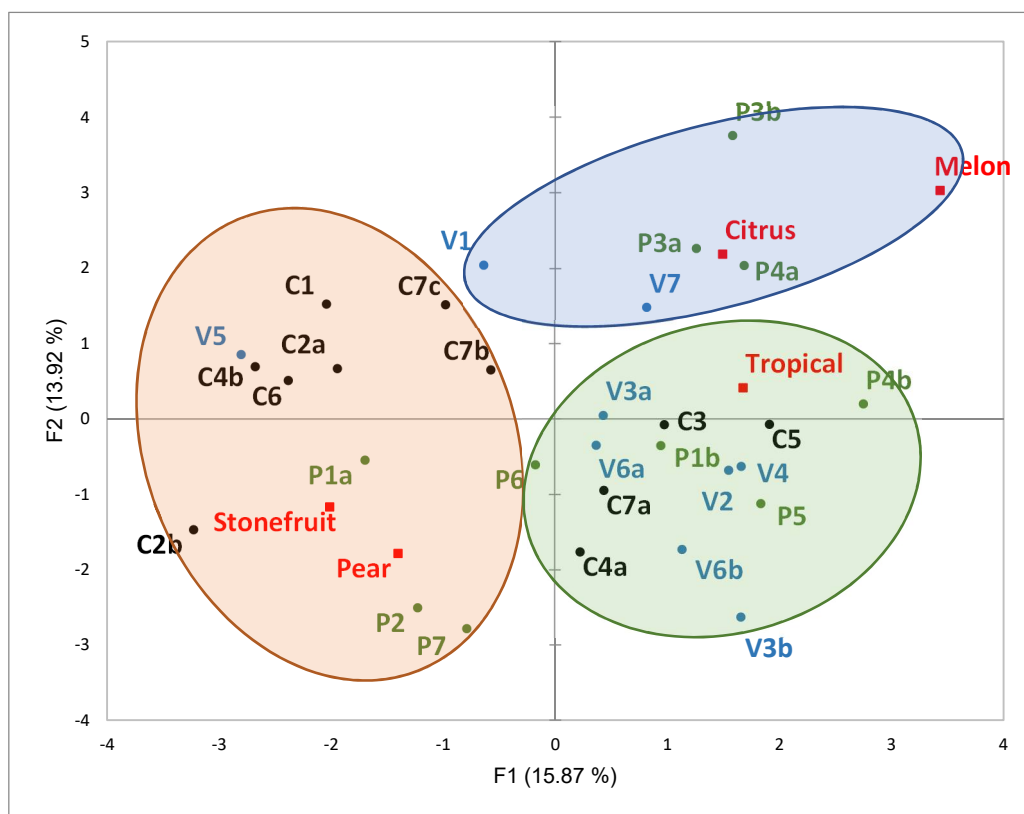


Figure S1. MFA plot showing wine experts PPM results of the separated replicate wines for the first and second factors. Ellipses identified groups according to k-means clustering. Varietal wines are shown in different colors.

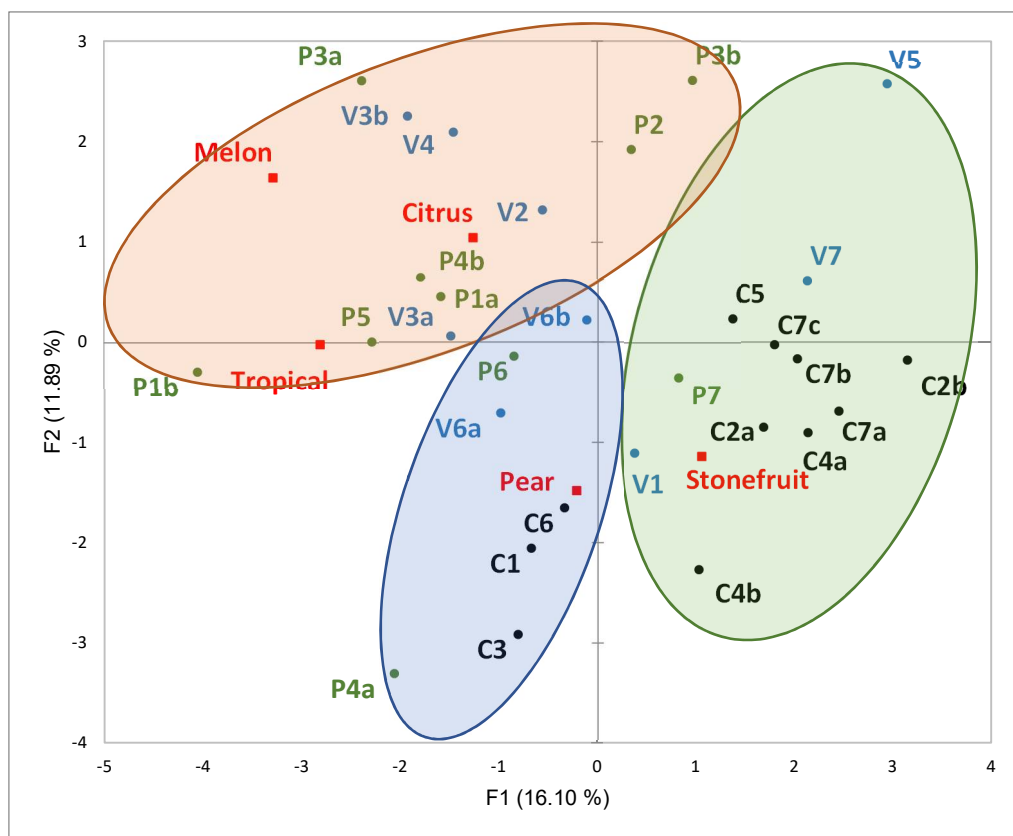


Figure S2. MFA plot showing trained consumers PPM results of the separated replicate wines for the first and second factors. Ellipses identified groups according to k-means clustering. Varietal wines are shown in different colors.