

Table S1. Odour activity values (OAV) of volatile compounds determined in Treixadura wines made with different yeasts.

| | Compounds | Aroma threshold ($\mu\text{g L}^{-1}$) | Aroma descriptor | Spontaneous | Lt93 | Lt93+ScXG3 | ScXG3 |
|-------------------------------|----------------------|--|------------------|-------------|--------|------------|-------|
| <i>Alcohols</i> | | | | | | | |
| Methanol | 668000 ^a | Chemistry, medicine | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 |
| 1-propanol | 830 ^a | Pungent, harsh, ripe fruit, alcohol | 24.57 | 24.19 | 28.80 | 27.96 | |
| 2-methyl-1-propanol* | 40000 ^{a,b} | Wine, solvent, bitter, fusel, oily, green | 0.93 | 0.65 | 0.91 | 1.34 | |
| 2-methyl-1-butanol* | 30000 ^b | Whiskey, malt, burnt, rough, nail polish | 0.54 | 0.53 | 0.58 | 0.78 | |
| 3-methyl-1-butanol* | 30000 ^b | Whiskey, malt, burnt, harsh, nail polish | 4.86 | 4.64 | 5.19 | 5.63 | |
| <i>Other major compounds</i> | | | | | | | |
| Acetaldehyde | 500 ^b | Pungent, bruised apple, sherry, nutty | 164.00 | 95.34 | 130.00 | 93.34 | |
| Ethyl acetate | 7500 ^b | Pineapple, nail polish, fruity | 4.98 | 6.13 | 5.16 | 5.38 | |
| <i>Acetates</i> | | | | | | | |
| 2-phenylethyl acetate* | 250 ^b | Flowery, rose, fruity, honey | 1.13 | 0.79 | 0.86 | 0.97 | |
| Hexyl acetate | 700 ^c | Sweet, fruity, pear-like, ripe fruit, fragrant | 0.18 | 0.16 | 0.11 | 0.13 | |
| Isoamyl acetate | 30 ^b | Banana | 41.90 | 51.60 | 49.13 | 38.07 | |
| <i>Ethyl Esters</i> | | | | | | | |
| Ethyl hexanoate* | 14 ^d | Green apple, fruity | 18.43 | 27.21 | 8.50 | 17.29 | |
| Ethyl octanoate | 5 ^d | Fruity, sweet, fresh | 72.00 | 105.60 | 95.80 | 68.60 | |
| Ethyl decanoate | 200 ^d | Sweet, fruity, solvent | 0.33 | 0.54 | 0.46 | 0.29 | |
| <i>Volatile organic acids</i> | | | | | | | |
| Butyric acid* | 173 ^d | Rancid, cheese, sweat | 6.72 | 8.51 | 8.30 | 5.57 | |
| Isobutyric acid* | 2300 ^d | Rancid, butter, cheese | 0.59 | 0.49 | 0.56 | 1.18 | |
| Isovaleric acid* | 33.4 ^d | Cheese, fatty, rancid, sweat | 11.83 | 10.21 | 11.62 | 20.24 | |
| Hexanoic acid* | 3000 ^b | Sweat, fatty, cheese | 0.85 | 1.09 | 0.96 | 0.68 | |
| Octanoic acid* | 500 ^d | Sweat, fatty, cheese, rancid | 9.36 | 11.18 | 9.86 | 7.08 | |
| Decanoic acid* | 1000 ^a | Rancid fat | 0.91 | 1.29 | 0.93 | 0.61 | |
| Dodecanoic acid | 1000 ^e | Soapy, waxy | 0.18 | 0.12 | 0.12 | 0.09 | |

* Significant differences among wines (see Table 3). ^a Etievant (1991)[42]; ^b Guth (1997)[41]; ^c Swiegers et al. (2005)[2]; ^d Ferreira et al. (2000)[40]; ^e Francis and Newton, (2005)[43].

Table S2. Odour activity values (OAV) of volatile compounds determined in Mencía wines made with different yeasts.

| | Compounds | Aroma threshold ($\mu\text{g L}^{-1}$) | Aroma descriptor | Spo | Lt93 | Lt93+Sc71B | Sc71B |
|-----------------------------|----------------------|--|------------------|--------|-------|------------|--------|
| <i>Alcohols</i> | | | | | | | |
| Benzyl alcohol | 620 ^a | Fruity, blackberry | | 0.02 | 0.01 | 0.01 | 0.02 |
| 2-methyl-1-propanol* | 40000 ^{b,c} | Wine, solvent, bitter, fusel, oily, green | | 0.04 | 0.00 | 0.03 | 0.02 |
| 3-methyl-1-butanol* | 30000 ^c | Whiskey, malt, burnt, harsh, nail polish | | 0.21 | 0.18 | 0.17 | 0.24 |
| 2-phenylethyl alcohol* | 10000 ^{c,d} | Floral, rose | | 0.56 | 0.39 | 0.33 | 0.65 |
| <i>Acetates</i> | | | | | | | |
| Ethyl acetate* | 7500 ^b | Pineapple, nail polish, fruity | | 0.99 | 0.49 | 0.54 | 1.43 |
| 2-phenylethyl acetate* | 250 ^b | Flowery, rose, fruity, honey | | 1.00 | 0.74 | 0.49 | 1.21 |
| Isoamyl acetate* | 30 ^{b,c} | Banana | | 63.90 | 55.32 | 54.93 | 94.85 |
| Hexyl acetate | 700 ^d | Sweet, fruity, pear-like, ripe fruit, fragrant | | 0.27 | 0.20 | 0.22 | 0.31 |
| <i>Ethyl Esters</i> | | | | | | | |
| Ethyl butyrate* | 20 ^{b,c} | Floral, fruity, apple | | 6.81 | 8.20 | 2.71 | 2.94 |
| Ethyl isovalerate* | 3 ^c | Fruity, lemon | | 6.69 | 2.76 | 2.90 | 4.52 |
| Ethyl hexanoate* | 14 ^c | Green apple, fruity | | 82.03 | 35.64 | 33.98 | 89.88 |
| Ethyl octanoate* | 5 ^c | Fruity, sweet, fresh | | 281.17 | 54.76 | 45.84 | 271.95 |
| Ethyl decanoate* | 200 ^c | Grape | | 1.72 | 0.43 | 0.21 | 1.24 |
| Ethyl dodecanoate | 1750 ^e | Pear, fruity, floral, leaf | | 0.00 | 0.00 | 0.00 | 0.00 |
| Diethyl succinate* | 200000 ^b | Butter | | 0.00 | 0.00 | 0.00 | 0.01 |
| <i>Fatty acids (C6-C10)</i> | | | | | | | |
| Hexanoic acid* | 3000 ^c | Sweat, fatty, cheese | | 0.04 | 0.02 | 0.01 | 0.05 |
| Octanoic acid* | 500 ^f | Sweat, fatty, cheese, rancid | | 0.49 | 0.06 | 0.04 | 0.48 |
| Decanoic acid* | 1000 ^b | Rancid fat | | 0.05 | 0.02 | 0.01 | 0.04 |

* Significant differences among Mencía wines (see Table 4). ^a Vilanova et al. (2007)[44]; ^b Etievant (1991)[42]; ^c Guth (1997)[41]; ^d Swiegers et al. (2005)[2]; ^e Englezos et al. (2018)[45];

^f Ferreira et al. (2000)[40].