

- Supplementary Material -

Highlighting the terroir influence on the aromatic profile of two Romanian white wines

Diana Ionela Popescu (Stegarus)^{1,2}, Oana Romina Botoran^{1,2}, Roxana Elena Ionete¹, Daniela Sandru³, Nicoleta Anca Sutan⁴, and Violeta-Carolina Niculescu^{1,*}

¹National Research and Development Institute for Cryogenic and Isotopic Technologies - ICSI Ramnicu Valcea, 4th Uzinei Street, P.O. Raureni, Box 7, 240050, Ramnicu Valcea, Romania

² Academy of Romanian Scientists, Splaiul Independentei 54, Bucharest, 050044, Romania

³Faculty of Agricultural Sciences, Food Industry and Environmental Protection, Lucian Blaga University of Sibiu, Dr. Ion Ratiu Street, No. 7-9, 550012, Sibiu, Romania

⁴Department of Natural Sciences, University of Pitesti, Targul din Vale 1, Pitesti, 110040, Romania

*Correspondence: violeta.niculescu@icsi.ro

Table S1. Aroma compounds concentrations

Aroma Compound	Fa-Silagiu (µg/L)	Fa-Aiud (µg/L)	Fa-Sarica-Niculitel (µg/L)	Fr- Silagiu (µg/L)	Fr – Aiud (µg/L)	Fr - Sarica-Niculitel (µg/L)
Alcohols						
1-heptanol	29.58±1.12	87.22±11.61	64.44±7.87	124.22±12.84	195.07±15.23	207.84±12.14
1-hexanol	312.05±14.02	244.32±12.02	341.24±11.55	509.12±28.14	521.78±33.27	729.82±36.21
2,3-butandiol	909.72±32.14	1009.48±18.51	657.99±24.91	1214.12±37.26	1503.41±21.39	1343.52±36.21
2-nonanol	41.77±2.54	39.39±3.08	62.5±4.14	8.19±0.97	11.34±1.02	5.38±0.61
2-pentanol	159.17±1.22	173.55±2.43	124.91±2.22	153.44±1.67	98.32±5.21	111.39±4.22
2-phenyl ethanol	8702.33±25.48	9112.74±19.12	7692.88±23.29	9219.48±91.29	10001.43±88.71	11783.21±55.34
3-methylthio-1-propanol	91.69±8.23	133.22±7.91	113.41±8.88	739.29±29.43	504.98±24.64	678.37± 31.36
benzyl alcohol	32.11±1.02	48.49±1.23	44.33±1.12	68.11±6.06	83.52±3.12	57.51±1.75
e-3-hexenol	7.88±0.21	8.97±0.31	4.78±0.20	16.35±1.38	18.26±2.06	10.02±1.24
isopentyl alcohol	9504.87±58.21	9691.44±39.72	8092.16±23.28	9552.29±58.21	10036.72±40.16	8736.66±44.47
linalool	76.23±1.99	54.31±2.27	55.97±1.78	117.91±10.16	118.11±4.81	105.42±12.39
beta-linalool	45.19±1.98	38.14±2.48	44.17±1.14	74.13±5.17	68.94±2.21	55.13±8.39
n-amyl alcohol	222.31±5.29	265.44±3.27	318.37±4.19	273±8.19	344.34±10.45	208.91±6.67
n-propanol	317.22±6.25	322.71±5.09	267.37±4.43	324.33±7.34	409.14±11.21	317.88±8.53
terpineol	5.88±0.40	2.37±0.25	6.29±0.23	167.11±18.54	172.29±27.31	124.38±21.92

trans-geraniol	11.11±0.30	23.01±2.11	11.92±1.13	44.65±5.25	37.41±3.31	52.75±8.36
Z-3-hexenol	10.89±0.28	10.11±1.98	12.39±1.90	9.43±1.95	10.1±2.04	10.29±2.32
Esters						
diethyl succinate	945.5±41.15	1119.23±43.28	777.77±14.15	862.29±17.36	980.14±20.18	1200.17±25.24
ethyl hexanoate	535.21±23.12	339.22±26.11	743.72±14.06	500.53±19.13	999.78±26.17	788.44±23.19
ethyl butyrate	290.53±23.18	190.43±10.98	155.71±20.12	265.34±29.26	160.99±23.14	289.17±31.05
ethyl decanoate	231.39±20.18	134.12±18.12	229.68±20.04	222.89±52.61	204.47±44.18	178.63±29.29
methyl-4-hydroxy butanoate	346.42±15.11	320.77±25.62	247.47±14.34	222.61±52.61	146.15±22.17	138.09±13.09
ethyl octanoate	1057.34±22.35	888.38±20.53	991.37±21.14	1085.14±22.11	1171.29±22.84	903.88±33.12
n-hexyl acetate	42.73±3.18	65.15±2.52	57.01±8.36	42.61±2.15	79.63±3.56	90.29±6.03
2-phenethyl acetate	143.28±14.12	138.6±8.16	145.33±10.03	127.25±11.13	135.27±10.42	139.34±19.16
Organic acids						
butandioic acid	1833.65±33.83	1934.33±21.22	1729.88±27.03	1145.27±24.14	1137.82±22.19	1101.88±21.03
butyric acid	9.79±1.49	15.36±2.35	23.28±1.23	10.05±1.16	8.14±0.88	7.69±1.11
capric acid	1007.22±34.01	784.13±27.01	872.29±32.39	1087.23±22.39	852.81±32.14	949.84±33.17
decanoic acid	529.47±25.81	602.24±29.98	302.39±27.27	420.23±33.11	501.22±34.13	610.09±24.12
hexanoic acid	687.43±15.71	501.39±24.64	596.97±24.12	207.43±19.20	217.21±21.05	233.01±32.08
isovaleric acid	367.22±13.67	272.81±11.66	461.25±10.62	516.44±14.12	685.11±17.08	610.27±15.15
octanoic acid	1232.31±31.91	1400.14±35.35	1304.29±27.16	1338.19±66.39	1001.21±58.48	1407.37±62.02
Other compounds						
eucalyptol	35.12±5.07	41.05±7.15	37.07±4.12	36.16±3.15	34.08±2.67	41.08±4.03
beta-citronellol	40.04±5.08	38.17±2.16	38.08±2.14	51.15±6.12	44.01±7.83	42.44±7.14
acetal	68.58±3.18	77.22±2.06	99.14±3.71	79.36±2.05	81.14±2.33	101.25±3.06
furfural	31.88±1.03	28.27±3.13	31.42±4.28	25.16±1.09	29.08±1.12	38.17±2.50