

Supplementary Material

SUPPLEMENTARY TABLE S1. Analyte name, precursor and product ions, declustering potential (DP), entrance potential (EP), collision energy (CE), Collision CellExitPotential (CXP), retention time and Q2/Q1 used in the LC-MS/MS analysis of MeSA glycosides.

Name	Molecular Formula	Precursor ion	Q1 Product Ion	DP	EP	CE	CXP	Q2 Product ion	DP	EP	CE	CXP	tr	Q2/Q1
MeSAG	C ₁₄ H ₁₈ O ₈	337.0	337.0	80	10	10	15	185.2	80	10	24	15	15.6	17
MeSA-violutoside	C ₁₉ H ₂₆ O ₁₂	469.1	469.1	80	10	10	15	337.2	80	10	38	15	15.2	108
MeSA-primeveroside	C ₁₉ H ₂₆ O ₁₂	469.1	469.1	80	10	10	15	337.2	80	10	38	15	15.7	108
MeSA-canthoside A	C ₁₉ H ₂₆ O ₁₂	469.1	469.1	80	10	10	15	337.2	80	10	38	15	14.9	108
MeSA-rutinoside	C ₂₀ H ₂₈ O ₁₂	483.1	483.1	80	10	10	15	337.1	80	10	35	15	16.8	60
MeSA-gentiobioside	C ₂₀ H ₂₈ O ₁₃	499.1	499.1	80	10	10	15	347.2	80	10	31	15	13.6	20
MSTG-A	C ₂₄ H ₃₄ O ₁₆	601.1	601.1	80	10	10	15	449.2	80	10	38	15	14.5	14

SUPPLEMENTARY TABLE S2. MeSA glycosides concentration (average \pm standard deviation) as $\mu\text{g/L}$ in the 18 single-cultivars considered.

CULTIVAR	TOTAL AMOUNT	MONOGLYCOSIDE						DIGLYCOSIDES		
		MeSAG	MeSA-gentiobioside	MeSA-violutoside	MeSA-rutinoside	MeSA-primeveroside	MeSA-canthoside A			
ALBANA	167.8 \pm 98.9	50.9 \pm 37.5	77.7 \pm 50.1	25.1 \pm 14.6	5.1 \pm 4.1	5.9 \pm 3.3	2.7 \pm 3.7			
ARNEIS	120.3 \pm 62.4	28.2 \pm 13.7	13.3 \pm 9.7	33.1 \pm 16.5	41.4 \pm 22.6	3.1 \pm 2.3	1.1 \pm 1.6			
CORTESE	211.3 \pm 103.4	58.8 \pm 26.5	77.6 \pm 48.8	64.1 \pm 36.3	3.2 \pm 1.6	5.7 \pm 3.2	1.6 \pm 2.9			
ERBALUCE	674.9 \pm 257.9	204.4 \pm 87.5	334.4 \pm 159.5	92.5 \pm 42.9	21.1 \pm 10.1	17.1 \pm 6.8	5.2 \pm 7.8			
FALANGHINA	36.5 \pm 27.2	14.4 \pm 8.9	5.8 \pm 4.2	11.9 \pm 11.6	0.3 \pm 0.5	2.4 \pm 2.4	1.5 \pm 2.6			
FIANO	146.4 \pm 48.9	74.9 \pm 18.6	24.1 \pm 21.9	27.3 \pm 14.3	2.1 \pm 0.9	14.1 \pm 3.8	3.8 \pm 6.4			
GARGANEGA	328.3 \pm 138.6	136.4 \pm 66.6	107.3 \pm 58.8	67.1 \pm 30.1	3.3 \pm 3.9	13.2 \pm 5.3	0.9 \pm 1.1			
GRECO DI TUFO	113.6 \pm 38.5	29.7 \pm 17.1	15.9 \pm 10.5	52.6 \pm 20.7	5.4 \pm 2.2	6.7 \pm 1.8	3.1 \pm 3.4			
GEWÜRZTRAMINER	29.5 \pm 12.7	8.9 \pm 4.7	7.1 \pm 5.7	12.3 \pm 5.1	0.3 \pm 0.6	0.2 \pm 0.3	0.4 \pm 0.5			
LUGANA	1286.3 \pm 453.6	504.3 \pm 150.9	561.2 \pm 304.9	145.1 \pm 45.1	38.6 \pm 34.9	34.4 \pm 11.9	2.7 \pm 4.3			
MÜLLER THURGAU	50.7 \pm 17.6	20.5 \pm 9.7	17.3 \pm 9.7	11.2 \pm 4.2	1.1 \pm 1.9	0.4 \pm 0.6	0.2 \pm 0.6			
NOSIOLA	53.3 \pm 19.7	16.2 \pm 10.6	14.8 \pm 8.6	14.5 \pm 4.8	3.1 \pm 1.4	1.7 \pm 1.4	2.6 \pm 3.6			
PALLAGRELLO	60.4 \pm 61.1	28.6 \pm 36.2	9.4 \pm 9.3	13.6 \pm 7.7	3.3 \pm 2.3	2.9 \pm 4.4	2.3 \pm 5.7			
PINOT GRIGIO	76.7 \pm 79.4	29.8 \pm 37.8	23.1 \pm 23.9	21.2 \pm 15.5	0.7 \pm 2.2	1.7 \pm 2.6	0.2 \pm 0.6			
RIBOLLA GIALLA	150.8 \pm 94.8	52.1 \pm 35.9	43.3 \pm 32.1	49.3 \pm 30.3	1.5 \pm 1.4	4.4 \pm 3.4	0.1 \pm 0.1			
VERMENTINO	34.1 \pm 17.1	13.8 \pm 7.1	5.8 \pm 3.4	13.2 \pm 7.3	0.3 \pm 0.3	0.7 \pm 0.6	0.1 \pm 0.1			
VERNACCIA	59.3 \pm 17.3	26.8 \pm 7.5	8.4 \pm 4.1	15.3 \pm 4.1	0.3 \pm 0.5	3.7 \pm 2.1	4.6 \pm 6.2			
VERDICCHIO	1101.6 \pm 591.9	452.1 \pm 157.6	461.3 \pm 392.1	115.2 \pm 60.6	36.7 \pm 23.9	31.3 \pm 16.9	4.7 \pm 4.2			

SUPPLEMENTARY DATA

Piergiovanni, M., Masuero, D., Carlin, S., Luzzini, G., Furlan, N., Slaghenaufi, D., Ugliano, M., Rolle, L., Rfo Segade, S., Piombino, P., Pittari, E., Versari, A., Parpinello, G. P., Marangon, M., Mayr, C. & Fulvio Mattivi (2023).

Free methyl salicylate and its glycosides mapping in monovarietal Italian white wines. *OENO One*, 57(2).

<https://doi.org/10.20870/oeno-one.2023.57.2.7361>

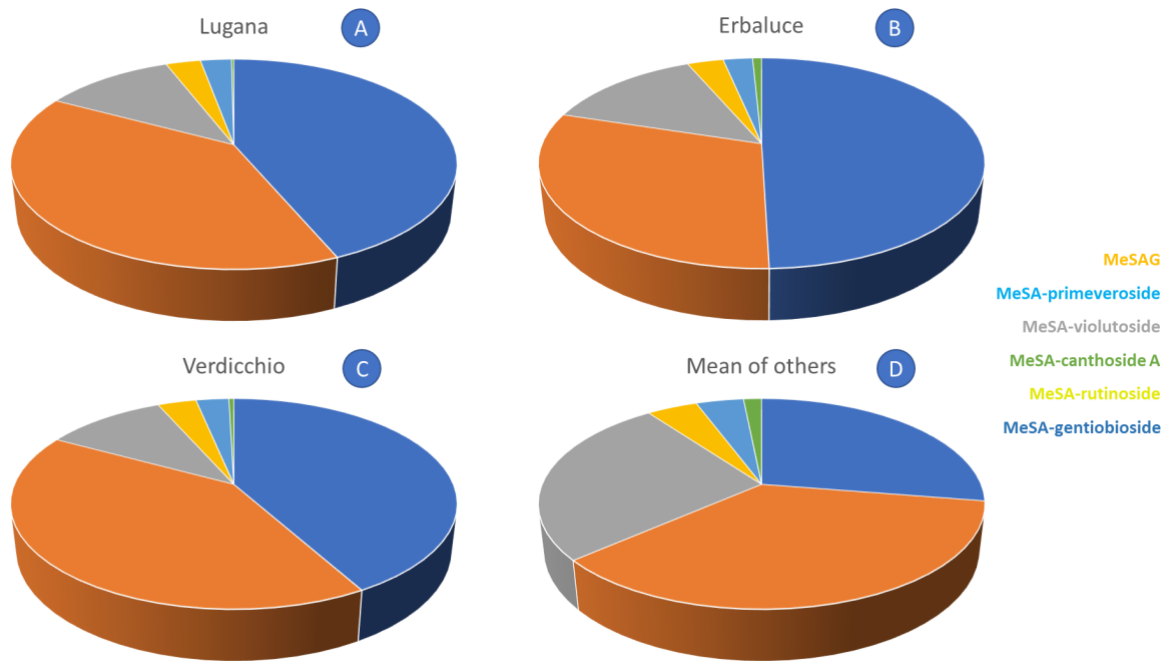


FIGURE S1. Pie charts of the relative MeSA distributions over its glycosylated forms in the 3 richest cultivars (Lugana – A, Erbaluce – B, Verdicchio – C) and a mean of the other 15 (D).