

Table S1: Relative content of main compounds in ZM wood vinegar

Group	Compound name	Chemical formula	R.T. /min	Area (%)
Acids	N-Ethylglycine	C ₄ H ₉ NO ₂	12.42	18.46
	lactic acid	C ₃ H ₆ O ₃	7.42	14.3
	3-Hydroxypyridine	C ₅ H ₅ NO	8.61	10.25
	palmitic acid	C ₁₆ H ₃₂ O ₂	19.32	4.9
	2-ketoadipate	C ₆ H ₈ O ₅	10.05	3.46
	glycolic acid	C ₂ H ₄ O ₃	7.68	2.12
	stearic acid	C ₁₈ H ₃₆ O ₂	21.11	1.64
	adipic acid	C ₆ H ₁₀ O ₄	13.38	1.37
	Minors	—	—	0.9
Phenols	catechol	C ₆ H ₆ O ₂	11.06	13.14
	guaiacol	C ₇ H ₈ O ₂	9.84	11.04
	m-cresol	C ₇ H ₈ O	8.63	1.64
	o-cresol	C ₇ H ₈ O	8.50	0.34
	Minors	—	—	0.29
Ketones	1,3-Cyclohexanedione	C ₆ H ₈ O ₂	10.74	1.03
	1,2-Cyclohexanedione	C ₆ H ₈ O ₂	15.33	1.03
	Minors	—	—	0.41
Esters	Methyl jasmonate	C ₁₃ H ₂₀ O ₃	16.17	1.19
	D-erythronolactone	C ₄ H ₆ O ₄	12.47	0.1
	Minors	—	—	0.04
Aldehydes	succinate semialdehyde	C ₄ H ₆ O ₃	9.20	3.25
	glutaraldehyde 3	C ₅ H ₈ O ₂	10.54	0.2
	2,5-dihydroxybenzaldehyde	C ₇ H ₆ O ₃	15.94	0.17
	butyraldehyde	C ₄ H ₈ O	10.50	0.15
	Minors	—	—	0.03
Alcohols	Perillyl Alcohol	C ₁₀ H ₁₆ O	12.21	1.96
	3-Methylamino-1,2-propanediol	C ₄ H ₁₁ NO ₂	9.46	0.44
	(+)-Dihydrocarveol	C ₁₀ H ₁₈ O	10.72	0.29
	3-Methylbenzyl Alcohol	C ₈ H ₁₀ O	10.00	0.13
	Acetol	C ₃ H ₆ O ₂	13.71	0.12
	Minors	—	—	0.26
Undetected substances	—	—	—	5.66

Table S2: Relative content of main compounds in SM wood vinegar

Group	Compound name	Chemical formula	R.T. /min	Area(%)
Acids	palmitic acid	C ₁₆ H ₃₂ O ₂	19.32	12.93
	lactic acid	C ₃ H ₆ O ₃	7.42	8.73
	picolinic acid	C ₆ H ₅ NO ₂	11.09	5.68
	2-ketoadipate	C ₆ H ₈ O ₅	10.05	4.56
	N-Ethylglycine	C ₄ H ₉ NO ₂	12.42	4.49
	adipic acid	C ₆ H ₁₀ O ₄	13.38	2.99
	stearic acid	C ₁₈ H ₃₆ O ₂	21.11	2.98
	glycolic acid	C ₂ H ₄ O ₃	7.68	1.77
	2-hydroxybutanoic acid	C ₄ H ₈ O ₃	8.33	0.64
Phenols	Minors	—	—	1.6
	guaiacol	C ₇ H ₈ O ₂	9.84	11.39
	catechol	C ₆ H ₆ O ₂	11.06	9.32
	m-cresol	C ₇ H ₈ O	8.63	2.82
	o-cresol	C ₇ H ₈ O	8.50	1.29
	Minors	—	—	0.14
Ketones	1,3-Cyclohexanedione	C ₆ H ₈ O ₂	10.74	3.56
	1,2-Cyclohexanedione	C ₆ H ₈ O ₂	15.33	2.38
	Minors	—	—	0.13
Esters	D-erythroneolactone	C ₄ H ₆ O ₄	12.47	3.14
	Linoleic acid methyl ester	C ₁₉ H ₃₄ O ₂	19.77	1.01
	Minors	—	—	0.09
Aldehydes	glutaraldehyde	C ₅ H ₈ O ₂	10.54	1.23
	2,5-dihydroxybenzaldehyde	C ₇ H ₆ O ₃	15.94	1.11
	succinate semialdehyde	C ₄ H ₆ O ₃	9.20	1.1
	Minors	—	—	0.06
Alcohols	Perillyl Alcohol	C ₁₀ H ₁₆ O	12.21	3.54
	3-Methylbenzyl Alcohol	C ₈ H ₁₀ O	10.00	0.58
	(+)-Dihydrocarveol	C ₁₀ H ₁₈ O	10.72	0.44
	3-Methylamino-1,2-propanediol	C ₄ H ₁₁ NO ₂	9.46	0.29
	Acetol	C ₃ H ₆ O ₂	13.71	0.29
	Minors	—	—	0.16
Undetected substances	—	—	—	10.78