

Wild *Vitis* Species as Stilbenes Sources: Cane Extracts and Their Antibacterial Activity against *Listeria monocytogenes*

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Supplementary material

Table S1: Stilbene content of canes for different *Vitis* species. Data are shown as mean of three measurements \pm SD. Similar superscript letters within the same column indicate significant differences between grapevine varieties ($p < 0.05$).

<i>Vitis</i> species	Stilbene content ($\mu\text{g/g}$)			
	piceid	piceatannol	resveratrol	ϵ -viniferin
<i>V. davidii</i>	1.0 ± 0.1 ^{abc}	40.3 ± 10.1 ^{ab}	101.8 ± 6.2 ^a	320.7 ± 14.0 ^{abc}
<i>V. romanetii</i>	3.0 ± 0.1 ^{ade}	39.2 ± 4.2 ^{cd}	135.6 ± 18.7 ^b	1177.2 ± 61.5 ^{ade}
<i>V. amurensis</i>	8.4 ± 0.3 ^{bdf}	7.0 ± 0.1 ^{ac}	96.9 ± 15.8 ^c	2438.9 ± 83.9 ^{bdf}
<i>V. pentagona</i>	6.7 ± 0.5 ^{cef}	7.5 ± 0.1 ^{bd}	261.7 ± 16.2 ^{abc}	3867.9 ± 129.7 ^{cef}

Table S2: The impact of the *V. amurensis* and *V. pentagona* cane extracts on the viable bacterial cells after exposure lasting between 0 and 24h. Data are shown as mean of three measurements \pm SD. Similar superscript small letters indicate pairwise significance within a raw (over time points), while similar superscript capital letters indicate pairwise significance within a column (at the same time point) ($p < 0.05$).

concentration of ϵ -viniferin in <i>Vitis</i> crude extracts ($\mu\text{g/mL}$)		CFU/ml $\times 10^6$					
		0h	2h	4h	8h	12h	24h
<i>V. amurensis</i>	39.2	2.35 \pm 0.10 abcde	1.90 \pm 0.10 afghiA	1.05 \pm 0.05 bfijkABCD	0.17 \pm 0.01 cgilmABC	0.03 \pm 0.00 dhjIABC	0 \pm 0 eikmABC
	19.8	2.35 \pm 0.10 abcde	1.90 \pm 0.10 afghB	1.70 \pm 0.05 bijkEFG	1.40 \pm 0.02 cfilmnDEF	0.85 \pm 0.00 dgjIDEF	0.13 \pm 0.00 ehkmnDEF
	9.9	2.35 \pm 0.10 a	1.95 \pm 0.15 bC	1.75 \pm 0.05 cdHIJ	2.55 \pm 0.15 eGHI	3.05 \pm 0.05 cfGHI	21.00 \pm 0.10 abdefGHI
	5.0	2.35 \pm 0.10 ab	2.95 \pm 0.05 cdD	3.35 \pm 0.25 efAEHKL	55.00 \pm 2.50 ghADGJKLM	265.00 \pm 13.50 acegiADGJKLMN	600.00 \pm 10.00 bdfhiADGJKLMN
<i>V. pentagona</i>	42.3	2.35 \pm 0.10 abcde	1.53 \pm 0.03 afghiE	0.99 \pm 0.08 bfjkIKMNO PQ	0.11 \pm 0.01 cgjmnJNO	0.01 \pm 0.00 dhkmKOP	0 \pm 0 eilnJOP
	21.3	2.35 \pm 0.10 abcde	1.91 \pm 0.01 afghiF	1.57 \pm 0.06 bfjkLNRS	1.20 \pm 0.01 cgjlmnKPQ	1.6 \pm 0.01 dhILQR	0.09 \pm 0.00 eikmnKQR
	10.7	2.35 \pm 0.10 a	1.77 \pm 0.03 bG	2.48 \pm 0.10 cBOTU	3.63 \pm 0.15 dLRS	2.28 \pm 0.07 eMS	23.00 \pm 1.13 abcdeLS
	5.3	2.35 \pm 0.10 ab	3.43 \pm 0.09 cdH	3.70 \pm 0.26 efCFIPRTV	62.00 \pm 5.50 gBEHNPR	256.67 \pm 14.50 aceBEHOQST	406.60 \pm 9.65 bdfigBEHMOQST
Control	0	2.35 \pm 0.10 abc	16.33 \pm 0.25 defABCDEFGH	24.27 \pm 1.10 ghiDGJMQSUV	286.67 \pm 25.54 adgjkCFIMOQS	820.00 \pm 26.46 behjICFINPRT	1133.33 \pm 99.75 cfiklCFNPRT

Table S3: The effect of pure ϵ -viniferin on the viable bacterial cells after exposure lasting between 0 and 24h. Data are shown as mean of three measurements \pm SD. Similar superscript small letters indicate pairwise significance within a row (over time points), while similar superscript capital letters indicate pairwise significance within a column (at the same time point) ($p < 0.05$).

pure ϵ -viniferin ($\mu\text{g/mL}$)	CFU/ml $\times 10^6$			
	0h	2h	6h	24h
188	2.30 ± 0.10 ^{abc}	1.63 ± 0.02 ^{adAB}	1.40 ± 0.01 ^{beA}	0 ± 0 ^{cdeAB}
95	2.30 ± 0.10 ^a	2.17 ± 0.15 ^{bCD}	2.03 ± 0.15 ^{cB}	0.01 ± 0.00 ^{abcCD}
48	2.30 ± 0.10 ^{ab}	4.10 ± 0.36 ^{cdACE}	30.00 ± 0.50 ^{aceC}	596.67 ± 15.27 ^{bdeACE}
0	2.30 ± 0.10 ^a	5.53 ± 0.42 ^{bbDE}	150.00 ± 13.58 ^{cABC}	1133.33 ± 112.28 ^{abcBDE}

Table S4: Concentration ranges of individual stilbenes for the calibration, equations of calibration curves, and correlation coefficients. Five concentration levels were used for the calibration of each analyte.

Compound	Range of calibration $\mu\text{g/mL}$	Equation	R^2
piceid	1-5	$y = 18088.1x - 954.57$	0.9999407
piceatannol	1-5	$y = 20635.6x - 2149.53$	0.9996082
trans-resveratrol	1-5	$y = 27274.5x - 2223.27$	0.9999355
ϵ -viniferin	1-100	$y = 15312.3x - 2098.50$	0.9999309
pterostilbene	1-5	$y = 29695.9x - 1196.42$	0.9999705