

The *in vitro* anti-pseudomonal activity of Cu²⁺, strawberry furanone, gentamicin, and lytic phages alone and in combination: pros and cons

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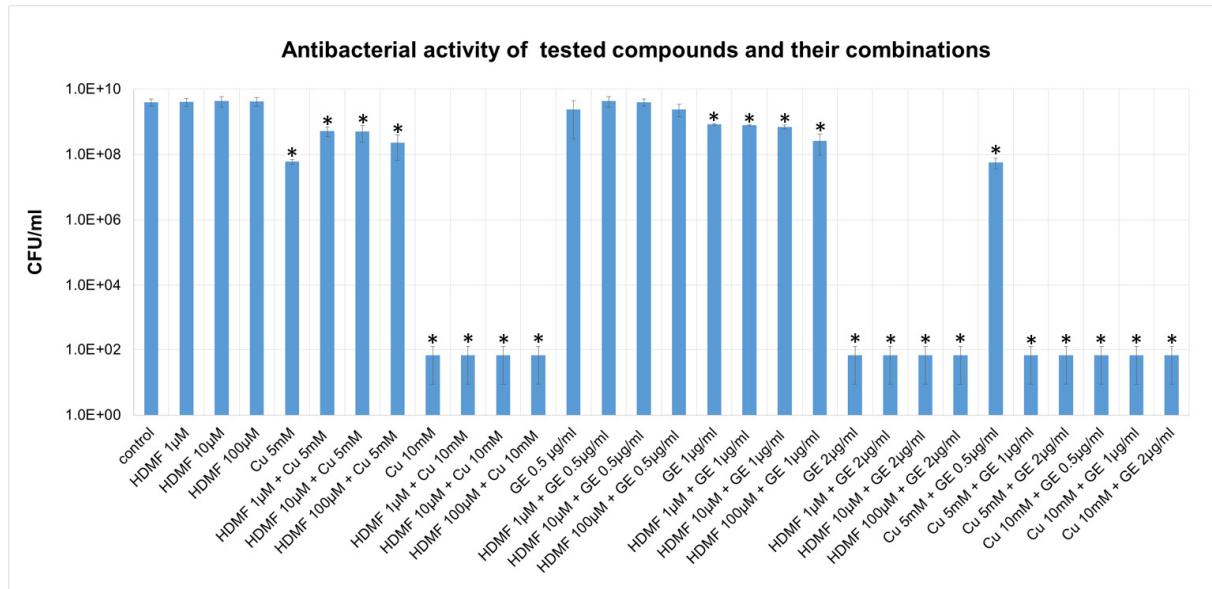


Figure S1. The impact of Cu²⁺, HDMF, and GE on 20 h growth of *P. aeruginosa* PAO1; *statistically significant differences according to PAO1 untreated control ($P<0.05$)

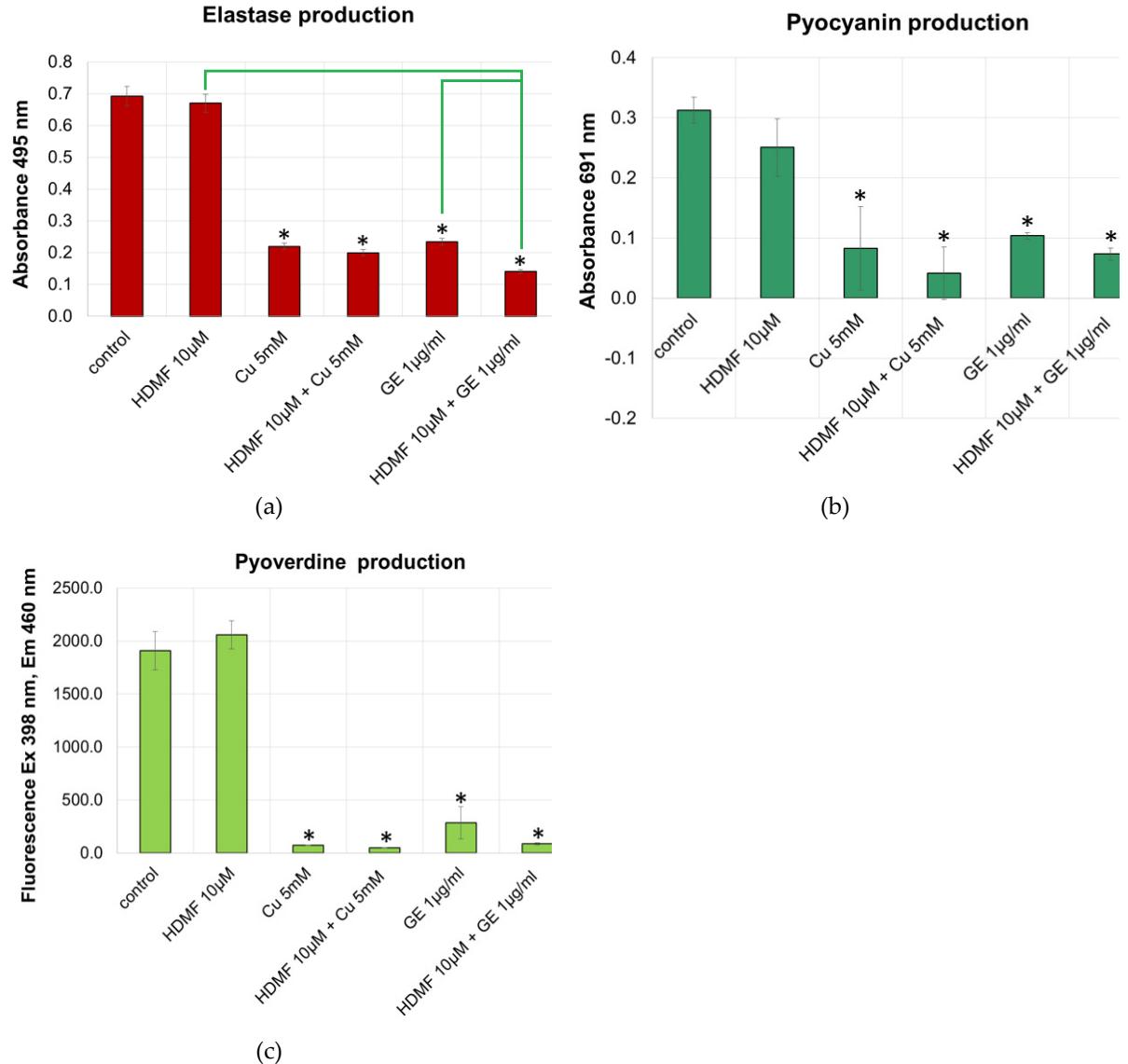


Figure S2. The impact of Cu²⁺, HDMF, and GE on *P. aeruginosa* PAO1 virulence determinants production: (a) elastase production; (b) pyocyanin production; (c) pyoverdine production; *statistically significant differences according to PAO1 control ($P<0.05$), brackets indicate statistically significant differences between agent combinations ($P<0.05$).

Table S1. Statistical analysis of the significance of differences between tested combinations of antibacterial and anti-virulent components ($P<0.05$).

	Figure 1b	Figure 1c	Figure 1d
HDMF 10 μ M GE 1 μ g/ml			
HDMF 10 μ M Cu 5mM	Y	Y	Y
GE 1 μ g/ml	Y	N	N
HDMF 10 μ M Cu 5mM			
Y-statistically significant with $P<0.05$; N-statistically not significant;			

Table S2. The impact of Cu^{2+} , HDMF and GE alone and in combination on antibiotic sensitivity patterns of *P. aeruginosa* PAO1.

Tested antibiotic	PAO1 (control)	HDMF 10 μ M	Cu 5 mM	HDMF 10 μ M Cu 5mM	GE 0,5 μ g/ml	HDMF 10 μ M GE 0,5 μ g/ml	Cu 5mM GE 0,5 μ g/ml
CTX	24-25 ^s	-	-	-	-	-	-
CAZ	29-31 ^s	-	-	-	-	-	-
PIP	31-32 ^s	-	-	-	-	-	-
TZP	33-35 ^s	-	-	-	-	-	-
IPM	27-29 ^s	-	-	-	-	-	-
CN	18-19 ^s	-	-	-	-	-	-
AK	24-25 ^s	-	-	-	-	-	-
CIP	36-38 ^s	-	-	-	-	-	-

Numbers indicate diameters of zones of inhibition in mm, S-sensitive according to EUCAST recommendations (https://www.eucast.org/ast_of_bacteria/), – no change observed,

Table S3. The starters used for genetic confirmation of phage culture purity.

Phage	Genome size	GenBank accession number	Starter sequence	Melting temperature [°C]
KT28	66,381 bp	KP340287	(F) CTTCGACGCCGACCGGGAAATC (R) GATATGCTACGCCGCCATTGTG	60.2 58.8
KTN4	279,593 bp	KU521356	(F) CTAACTAAATATATTGACGCTGTATCG (R) CCGCTATATACTTGTAGATAACGC	53.7 54
LUZ19	43,548 bp	NC_010326	(F) CTAACTAAATATATTGACGCTGTATCG (R) CAACCTCCAGCCAATCTCAATAAAAATT	62 57.3