

Article

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Jin, Naifu, Semple, Kirk T., Jiang, Longfei, Luo, Chunling, Zhang, Dayi and Martin, Francis L
ORCID: 0000-0001-8562-4944 (2018) Spectrochemical analyses of growth phase-related bacterial responses to low (environmentally-relevant) concentrations of tetracycline and nanoparticulate silver. *The Analyst*. ISSN 0003-2654

It is advisable to refer to the publisher's version if you intend to cite from the work.
<http://dx.doi.org/10.1039/C7AN01800B>

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Electronic Supplementary Information

Spectrochemical analyses of growth phase-related bacterial responses to low (environmentally relevant) concentrations of tetracycline and nanoparticulate silver

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Table S1. Growth impact under each treatment (*M. vanbaalenii* PYR-1)

Treatment	Control	AgNP	Tetracycline	Binary
P-value	$P < 0.0001$	$P < 0.0001$	$P < 0.0001$	$P < 0.0001$
Are means significantly different? ($P < 0.05$)	Yes	Yes	Yes	Yes
Paired-group comparison	Significant?	Significant?	Significant?	Significant?
Log vs. Stationary	Yes (****)	Yes (****)	Yes (****)	Yes (****)
Log vs. Death	Yes (****)	Yes (****)	Yes (****)	Yes (****)
Stationary vs. Death	Yes (****)	Yes (****)	Yes (****)	Yes (****)

One-way analysis of variance (ANOVA) with Tukey's post hoc test.

Table S2. Growth impact under each treatment (*P. fluorescens*)

Treatment	Control	AgNP	Tetracycline	Binary
P-value	$P < 0.0001$	$P < 0.0001$	$P < 0.0001$	$P < 0.0001$
Are means significantly different? ($P < 0.05$)	Yes	Yes	Yes	Yes
Paired-group comparison	Significant?	Significant?	Significant?	Significant?
Log vs. Stationary	Yes (****)	Yes (****)	Yes (****)	Yes (****)
Log vs. Death	Yes (****)	Yes (****)	Yes (****)	Yes (****)
Stationary vs. Death	Yes (****)	Yes (****)	Yes (****)	Yes (****)

One-way analysis of variance (ANOVA) with Tukey's post hoc test.

Table S3. Treatment impact in each growth phase (*M. vanbaalenii* PYR-1)

Growth phase	Exponential	Stationary	Death
P-value	$P < 0.0001$	$P < 0.0001$	$P < 0.0001$
Are means significantly different? ($P < 0.05$)	Yes	Yes	Yes
One- or two-tailed P-value?	Two-tailed	Two-tailed	Two-tailed
Paired-group comparison	Significant?	Significant?	Significant?
Control vs. Silver	Yes (****)	Yes (****)	Yes (****)
Control vs. Tet	Yes (****)	Yes (****)	Yes (****)
Silver vs. Tet	Yes (****)	Yes (****)	Yes (****)
Control vs. Binary	Yes (****)	Yes (****)	Yes (****)

One-way analysis of variance (ANOVA) with Tukey's post hoc test.

Table S4. Treatment impact in each growth phase (*P. fluorescens*)

Growth phase	Exponential	Stationary	Death
P-value	$P < 0.0001$	$P < 0.0001$	$P < 0.0001$
Are means significantly different? ($P < 0.05$)	Yes	Yes	Yes
One- or two-tailed P-value?	Two-tailed	Two-tailed	Two-tailed
Paired-group comparison	Significant?	Significant?	Significant?
Control vs. Silver	Yes (****)	Yes (****)	Yes (****)
Control vs. Tet	Yes (****)	Yes (****)	Yes (****)
Silver vs. Tet	Yes (****)	Yes (****)	Yes (****)
Control vs. Binary	Yes (****)	Yes (****)	Yes (****)

One-way analysis of variance (ANOVA) with Tukey's post hoc test.