antibiotics

MDPI

**Supplementary**

**Table S1:** PDI of *E. amylovora* $^{SmR}$ using B17-0024 w/o Sm in medium (n = 3)

| | CFU / 100 µL | | | relative inactivation [$CFU_{control}/CFU_{sample}$] | | |
|---|---|---|---|---|---|---|
| | mean | ± | SD | mean | ± | SD |
| Control -/- (30 min) | 4.57E+07 | ± | 1.15E+07 | 1.00E+00 | ± | 0.00E+00 |
| Dark control, 100 µM (30 min) | 5.11E+07 | ± | 1.61E+07 | 9.23E-01 | ± | 1.99E-01 |
| Light control (30 min) | 5.15E+07 | ± | 2.06E+07 | 1.01E+00 | ± | 5.93E-01 |
| PDI, B17-0024, 1 µM (5 min) | 6.80E+07 | ± | 1.08E+07 | 6.76E-01 | ± | 1.74E-01 |
| PDI, B17-0024, 10 µM (5 min) | 4.28E+07 | ± | 2.35E+07 | 1.25E+00 | ± | 6.23E-01 |
| PDI, B17-0024, 100 µM (5 min) | 3.32E+03 | ± | 3.02E+03 | 2.44E+05 | ± | 4.03E+05 |
| PDI, B17-0024, 1 µM (30 min) | 5.46E+07 | ± | 9.04E+06 | 8.52E-01 | ± | 2.70E-01 |
| PDI, B17-0024, 10 µM (30 min) | 1.67E+07 | ± | 1.42E+07 | 8.08E+00 | ± | 1.00E+01 |
| PDI, B17-0024, 100 µM (30 min) | 5.53E+01 | ± | 4.71E+01 | 1.17E+07 | ± | 1.93E+07 |

**Table S2:** PDI of *E. amylovora* $^{SmR}$ using B17-0024 with 100 µg/ml Sm (n = 3)

| | CFU / 100 µL | | | relative inactivation [$CFU_{control}/CFU_{sample}$] | | |
|---|---|---|---|---|---|---|
| | mean | ± | SD | mean | ± | SD |
| Control -/- (30 min) | 7.11E+07 | ± | 3.11E+07 | 1.00E+00 | ± | 0.00E+00 |
| Dark control, 100 µM (30 min) | 1.13E+08 | ± | 1.95E+07 | 6.61E-01 | ± | 3.91E-01 |
| Light control (30 min) | 8.07E+07 | ± | 3.75E+07 | 9.42E-01 | ± | 3.13E-01 |
| PDI, B17-0024, 1 µM (5 min) | 8.33E+07 | ± | 4.56E+07 | 9.71E-01 | ± | 3.77E-01 |
| PDI, B17-0024, 10 µM (5 min) | 4.93E+07 | ± | 1.62E+07 | 1.56E+00 | ± | 9.58E-01 |
| PDI, B17-0024, 100 µM (5 min) | 1.63E+01 | ± | 9.71E+00 | 5.79E+06 | ± | 3.69E+06 |
| PDI, B17-0024, 1 µM (30 min) | 6.97E+07 | ± | 3.70E+07 | 1.15E+00 | ± | 4.09E-01 |
| PDI, B17-0024, 10 µM (30 min) | 3.56E+06 | ± | 1.74E+06 | 2.14E+01 | ± | 5.93E+00 |
| PDI, B17-0024, 100 µM (30 min) | 3.38E+02 | ± | 5.82E+02 | 3.82E+07 | ± | 5.72E+07 |

**Table S3:** PDI of *E. amylovora* $^{SmR}$ based on Chl supplemented with 1.2% PASA w/o Sm in medium (n = 3)

| | CFU / 100 µL | | | relative inactivation [$CFU_{control}/CFU_{sample}$] | | |
|---|---|---|---|---|---|---|
| | mean | ± | SD | mean | ± | SD |
| Control -/- | 7.96E+07 | ± | 2.68E+07 | 1.00E+00 | ± | 0.00E+00 |
| Dark control, 100 µM Chl + 1.2 % PASA (30 min) | 2.23E+06 | ± | 7.58E+05 | 3.62E+01 | ± | 7.13E+00 |
| Light control, 1.2 % PASA (30 min) | 7.23E+05 | ± | 7.72E+05 | 2.76E+02 | ± | 2.91E+02 |
| PDI, 1 µM Chl + 1.2 % PASA (5 min) | 8.41E+05 | ± | 1.20E+06 | 9.04E+02 | ± | 1.35E+03 |
| PDI, 10 µM Chl + 1.2 % PASA (5 min) | 1.34E+05 | ± | 9.77E+04 | 1.41E+03 | ± | 1.67E+03 |
| PDI, 100 µM Chl + 1.2 % PASA (5 min) | 1.45E+03 | ± | 1.92E+03 | 7.98E+05 | ± | 1.28E+06 |
| PDI, 1 µM Chl + 1.2 % PASA (30 min) | 7.32E+05 | ± | 4.05E+05 | 1.17E+02 | ± | 2.77E+01 |
| PDI, 10 µM Chl + 1.2 % PASA (30 min) | 2.95E+05 | ± | 2.14E+05 | 4.50E+02 | ± | 3.77E+02 |
| PDI, 100 µM Chl + 1.2 % PASA (30 min) | 1.65E+02 | ± | 1.51E+02 | 3.76E+05 | ± | 2.63E+05 |

**Table S4:** PDI of *E. amylovora* $^{SmR}$ based on Chl supplemented with 1.2% PASA and 100 μg/ml Sm (n = 3)

| | CFU / 100 μL | | | relative inactivation [$CFU_{control}/CFU_{sample}$] | | |
|---|---|---|---|---|---|---|
| | mean | ± | SD | mean | ± | SD |
| Control -/- | 1.13E+08 | ± | 1.27E+07 | 1.00E+00 | ± | 0.00E+00 |
| Dark control, 100 μM Chl + 1.2 % PASA (30 min) | 1.25E+07 | ± | 1.81E+07 | 4.20E+01 | ± | 4.31E+01 |
| Light control, 1.2 % PASA (30 min) | 9.38E+06 | ± | 8.26E+06 | 1.86E+02 | ± | 3.09E+02 |
| PDI, 1 μM Chl + 1.2 % PASA (5 min) | 2.43E+06 | ± | 4.13E+06 | 2.14E+03 | ± | 2.12E+03 |
| PDI, 10 μM Chl + 1.2 % PASA (5 min) | 1.07E+06 | ± | 1.83E+06 | 1.87E+04 | ± | 2.54E+04 |
| PDI, 100 μM Chl + 1.2 % PASA (5 min) | 2.67E+05 | ± | 4.62E+05 | 2.35E+05 | ± | 2.18E+05 |
| PDI, 1 μM Chl + 1.2 % PASA (30 min) | 1.91E+06 | ± | 2.76E+06 | 2.56E+02 | ± | 2.06E+02 |
| PDI, 10 μM Chl + 1.2 % PASA (30 min) | 4.16E+06 | ± | 7.08E+06 | 1.15E+03 | ± | 1.12E+03 |
| PDI, 100 μM Chl + 1.2 % PASA (30 min) | 6.04E+04 | ± | 1.04E+05 | 1.01E+06 | ± | 1.27E+06 |

**Abbreviations:** ***CFU***, *Colony forming unit(s);* ***Chl***, Sodium magnesium chlorophyllin *(Na-Chlorophyllin);* ***DPBS***, *Dulbecco's modified phosphate buffered saline;* ***E. amylovora*** $^{SmR}$, *Streptomycin resistant strain of Erwinia amylovora;* ***E. amylovora*** $^{WT}$, *Susceptible strain of Erwinia amylovora (type strain, DSM 30165);* ***MIC***, *Minimum inhibitory concentration;* ***mean***, *Mean value;* ***MPM***, *Nutrient medium with meat extract and peptone;* ***$Na_2EDTA$***, Ethylenediaminetetraacetic acid disodium salt dihydrate; ***o/n***, *Overnight;* ***PASA***, *Polyaspartic acid;* ***PDI***, *Photodynamic Inactivation of microorganisms;* ***PS***, *Photosensitizer;* ***RCF***, Relative centrifugal force; ***ROS***, *Reactive oxygen species;* ***RPM***, *Revolutions per minute of rotor;* ***SD***, *Standard deviation;* ***Sm***, *Streptomycin sulfate salt;* ***w/o***, *Without*