

**Supplementary Table S1.** Bacterial count of rainbow trout (*Oncorhynchus mykiss*) fillets coated with nanoemulsions containing optimized essential oil (EO) blend<sup>ε</sup> and stored at 4 ± 1°C for 9 days.

<i>Escherichia coli</i>				
Treatments*	Day 0	Day 3	Day 6	Day 9
Control	6.91 ± 0.38	6.80 ± 0.09	6.93 ± 0.11	6.98 ± 0.13
NE <sub>0.5</sub>	6.97 ± 0.83	7.08 ± 0.16	7.02 ± 0.12	7.03 ± 0.06
NE <sub>1</sub>	7.22 ± 0.47	6.94 ± 0.12	7.13 ± 0.12	6.90 ± 0.38
NE <sub>2</sub>	7.23 ± 0.17	6.84 ± 0.08	6.85 ± 0.06	6.88 ± 0.31
<i>Staphylococcus aureus</i>				
Treatments	Day 0	Day 3	Day 6	Day 9
Control	6.45 ± 0.19	5.46 ± 0.08	6.18 ± 0.15	7.25 ± 0.04
NE <sub>0.5</sub>	6.41 ± 0.07	6.05 ± 0.10	6.32 ± 0.09	7.13 ± 0.01
NE <sub>1</sub>	6.23 ± 0.18	6.11 ± 0.07	6.20 ± 0.02	6.99 ± 0.04
NE <sub>2</sub>	6.30 ± 0.16	5.95 ± 0.18	5.67 ± 1.02	7.03 ± 0.04
<i>Salmonella</i> Enteritidis				
Treatments	Day 0	Day 3	Day 6	Day 9
Control	6.67 ± 0.17	6.89 ± 0.04	6.97 ± 0.15	7.00 ± 0.19
NE <sub>0.5</sub>	6.58 ± 0.18	6.94 ± 0.11	6.95 ± 0.11	6.88 ± 0.36
NE <sub>1</sub>	6.69 ± 0.07	6.72 ± 0.16	6.91 ± 0.09	6.71 ± 0.30
NE <sub>2</sub>	6.82 ± 0.11	6.65 ± 0.12	6.85 ± 0.09	6.60 ± 0.06

Results are expressed as the mean ± standard deviation ( $n = 3$ ). \*Control (absence of antioxidant); NE<sub>0.5</sub> (0.5% of the optimized blend nanoemulsion); NE<sub>1</sub> (1% of the optimized blend nanoemulsion); NE<sub>2</sub> (2% of the optimized blend nanoemulsion). <sup>ε</sup>Optimized EO blend was composed of oregano (*Origanum vulgare*), thyme (*Thymus vulgaris*), and lemongrass (*Cymbopogon citratus*) at 50%, 40%, and 10%, respectively.