***Supplementary Material***

**Supplementary Table S1.** Evaluation of the pH and titratable acidity of the medium throughout the cultivation time of *Salmonella* Enteritidis PT4 578 in anaerobic TSB with or without the addition of 50 nmol L-1 of C12-HSL.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Time (h)** | **pH** | |  | **Titratable acidity (eq.L-1)** | |
| Control | C12-HSL |  | Control | C12-HSL |
| **0** | 6.45A | 6.45A |  | 16.06E | 16.06E |
| **4** | 5.81bC | 5.90aB |  | 26.10D | 26.10D |
| **6** | 5.49bE | 5.56aE |  | 30.12C | 30.12C |
| **7** | 5.35F | 5.38F |  | 32.13B | 32.13B |
| **12** | 5.31F | 5.28G |  | 34.14A | 34.14A |
| **24** | 5.54bD | 5.61aD |  | 30.12bC | 32.13aB |
| **36** | 5.86B | 5.83C |  | 30.79C | 30.13B |

The evaluation was made between control and C12-HSL treatment at specific times and over time.Different lowercase letters on the same line (between control and C12-HSL treatment) and different capital letters in the same column (over time) differs at 5% probability (*p* < 0.05) by Tukey's test. When no lower case letter is shown, there is no statistical difference between control and C12-HSL treatment.