Supplemental Material.

Table S1. Primers and probes for qPCR detection of *Salmonella* spp. and *Listeria monocytogenes* from pre-enriched Modified Moore Swabs samples of irrigation water sources, based on Kawasaki et al. (2010)*.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Oligonucleotide** | **Sequence (5'→3')** | **PCR Amplicon size** | **Target Organism** |
| TS-11 (Forward) | GTCACGGAAGAAGAGAAATCCGTACG | 375 bp | *Salmonella* spp. |
| TS-5 (Reverse) | GGGAGTCCAGGTTGACGGAAAATTT |
| S-FAM (Probe) | [FAM]ACAAGAAGCCCTGAGCGCCGCTGTGAT[BHQ1] |
| LM1 (Forward) | CGGAGGTTCCGCAAAAGATG | 234 bp | *Listeria monocytogenes* |
| LM2 (Reverse) | CCTCCAGAGTGATCGATGTT |
| L-HEX (Probe) | [HEX]AGTTCAAATCATCGACGGCAACCTCGGA[TAM] |
|  |  |  |  |

Table S2. PCR Primer / Probe Composition. This mix is prepared and added to the PCR Reaction Mix.

|  |  |  |
| --- | --- | --- |
| **Primer Designation** | **Final PCR Reaction Concentration (µM)** | **Primer/Probe Concentration (µM) in Master Mix** |
| TS-11 | 0.12 | 15 |
| TS-5 | 0.12 | 15 |
| S-FAM | 0.025 | 3.125 |
| LM1 | 0.1 | 12.5 |
| LM2 | 0.1 | 12.5 |
| L-HEX | 0.025 | 3.125 |

Table S3. PCR Reaction Mixture, component by volume (mL).

|  |  |  |  |
| --- | --- | --- | --- |
| **Reaction Component** | **Volume/rxn (μL)** | | **Reaction Concentration** |
| 2x SensiFAST Probe Lo-ROX\* | 10 | | 1X |
| Primer/Probe Mix | 0.16 | | See Primer/Probe Mix Composition |
| Nuclease-free Water | Up to 20 | | -- |
| Template DNA | Variable | | -- |
| Reaction Volume | 20 | -- | |
| \*2x SensiFast (Bioline) |  | |  |

Table S4. Thermal cycling conditions.

|  |  |  |  |
| --- | --- | --- | --- |
| **Cycling Step** | **Time** | **Temp (°C)** |  |
| Initial Denaturation | 10 min | 95 |  |
| Denaturation | 20 sec | 95 | **40 cycles** |
| Annealing | 30 sec | 60 |
| Extension\* | 30 sec | 72 |
| Final Extension | 7 min | 72 |  |
| \*Collect fluorescent data at the end of this step | |  |  |
| \*Thermocycler used - Mx3005P QPCR System (Agilent) | |  |  |