**Table S1.** Arsenic specific primers used in this study

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Target gene | Primer | Sequence (5´-3´) | Annealing temp. (°c) | Reference |
| *aioA* | aoxBM1-2F-ND | CCACTTCTGCATCGTGGGCTGTGGCTA | 53 | Quemeneur *et al*., 2010 |
| aoxBM2-1R-ND | GGAGTTGTAGGCGGGCCGGTTGTGGAT |
| *arrA* | arrA-CVF1 | CACAGCGCCATCTGCGCCGA | 57 | Mirza *et al*., 2017 |
| arrA-CVR1 | CCGACGAACTCCYTGYTCCA |
| *arsC* | smrc-42-f | TCACGCAATACCCTTGAAATGATC  | 55 | Sun *et al*., 2004 |
| smrc-376-r | ACCTTTTCACCGTCCTCTTTCGT  |
| *arsM* | arsMF1 | TCYCTCGGCTGCGGCAAYCCVAC | 57 | Jia *et al*., 2013 |
| arsMR2 | CGWCCGCCWGGCTTWAGYACCCG |

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