

Optimising sampling and analysis protocols in environmental DNA studies – Supplementary Information

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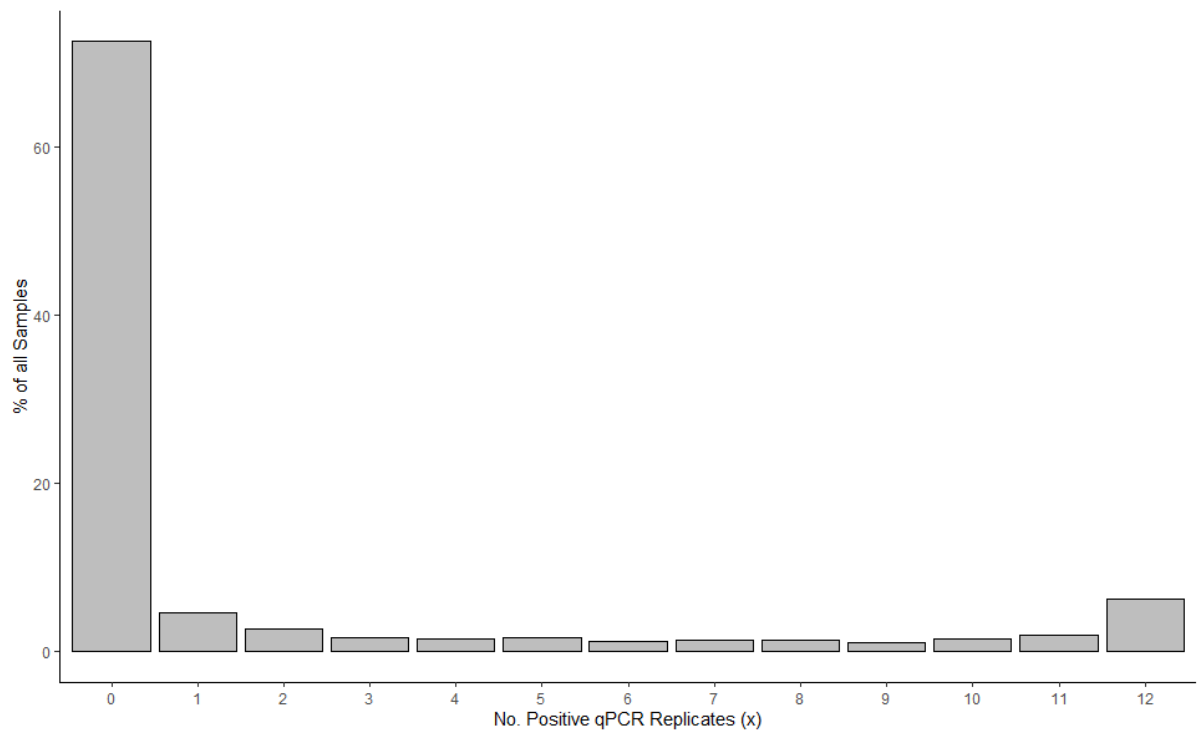


Figure S1 - Percentage of all samples with x number of amplifying qPCR replicates.

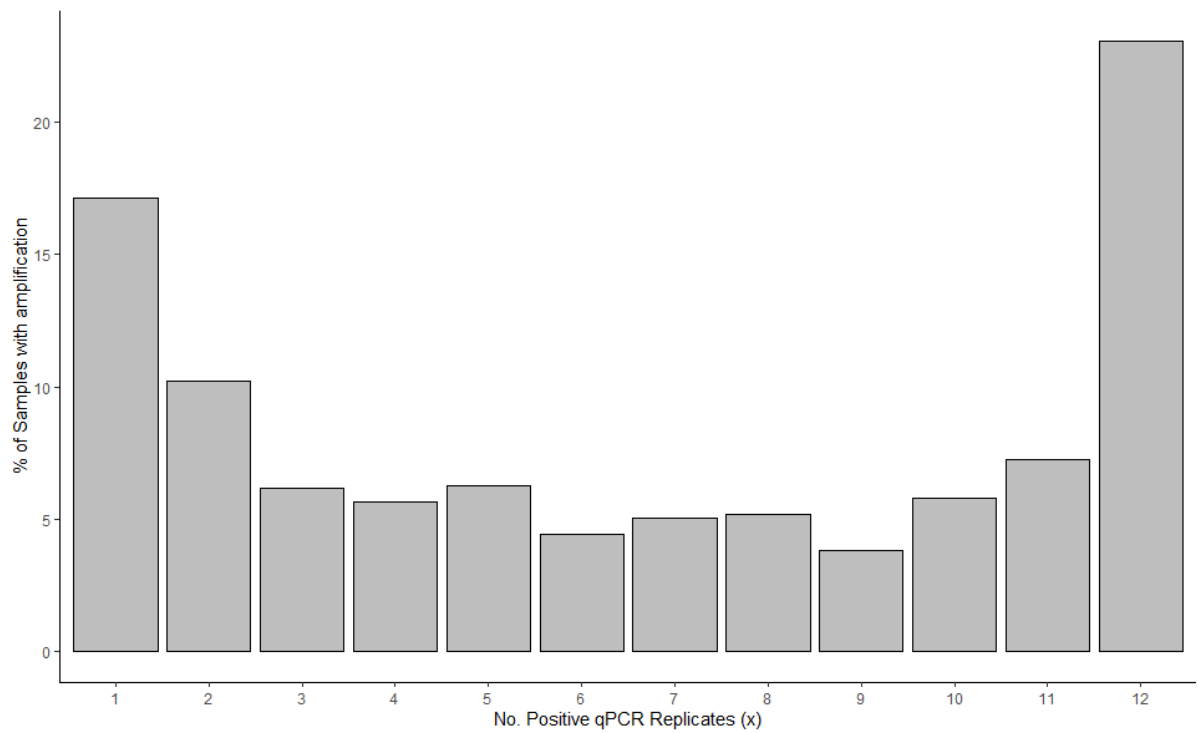
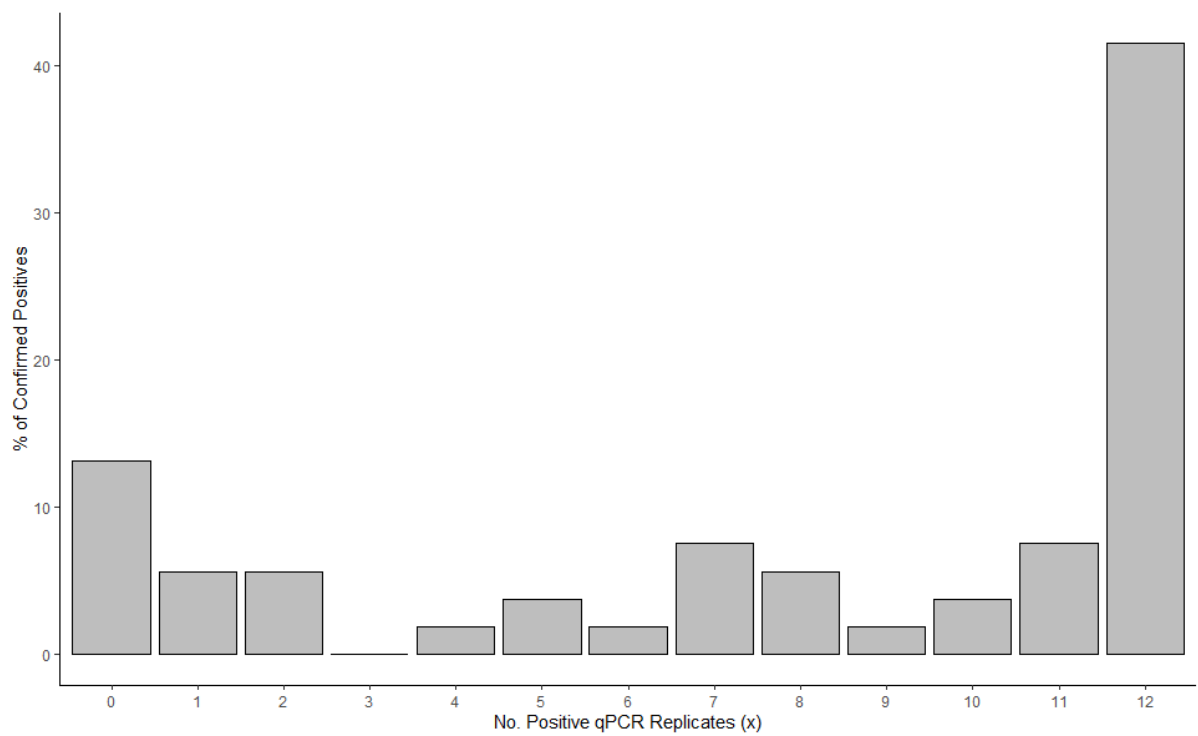


Figure S2 - Percentage of samples with x number amplifying qPCR replicates, excluding samples which showed no amplification.

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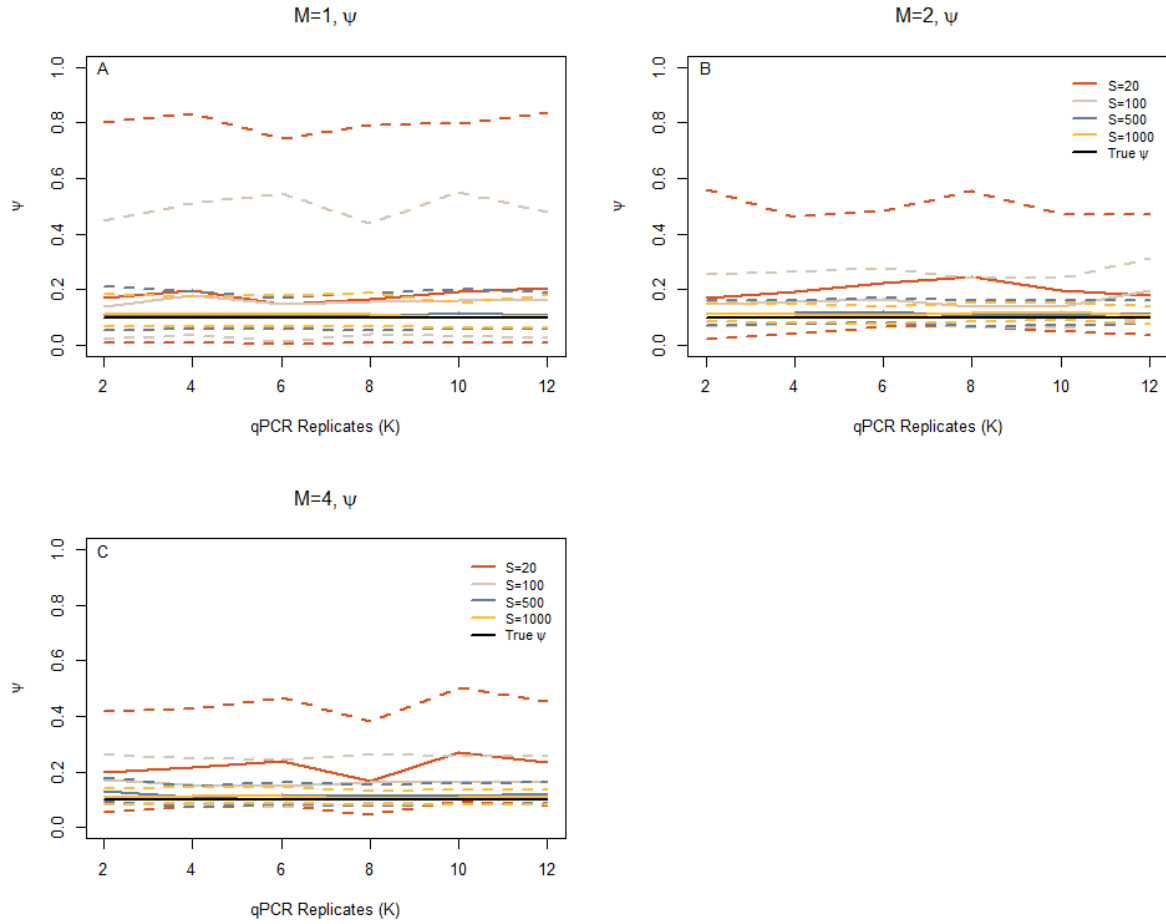
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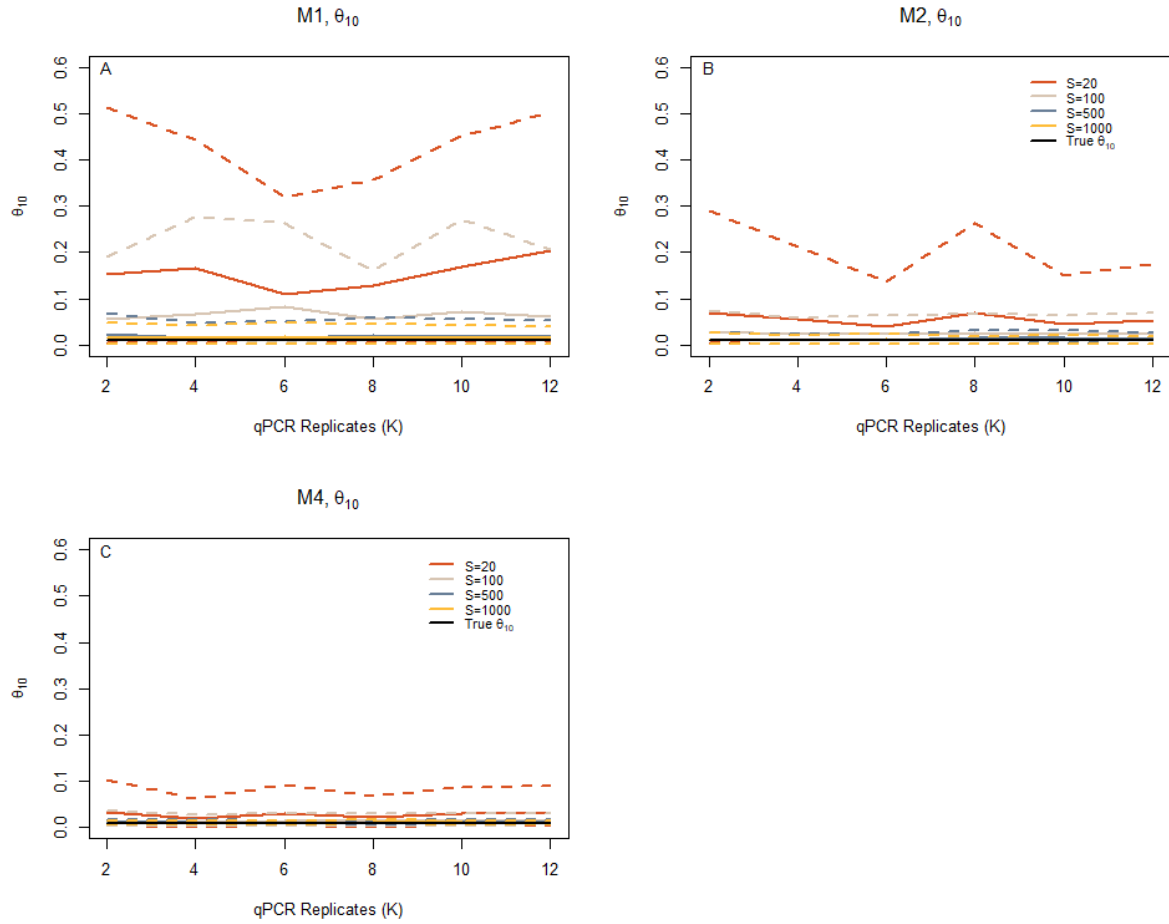
15 Figure S3 – The percentage of samples with confirmed presence, compared with the number
16 of positive qPCR replicates for those sites.

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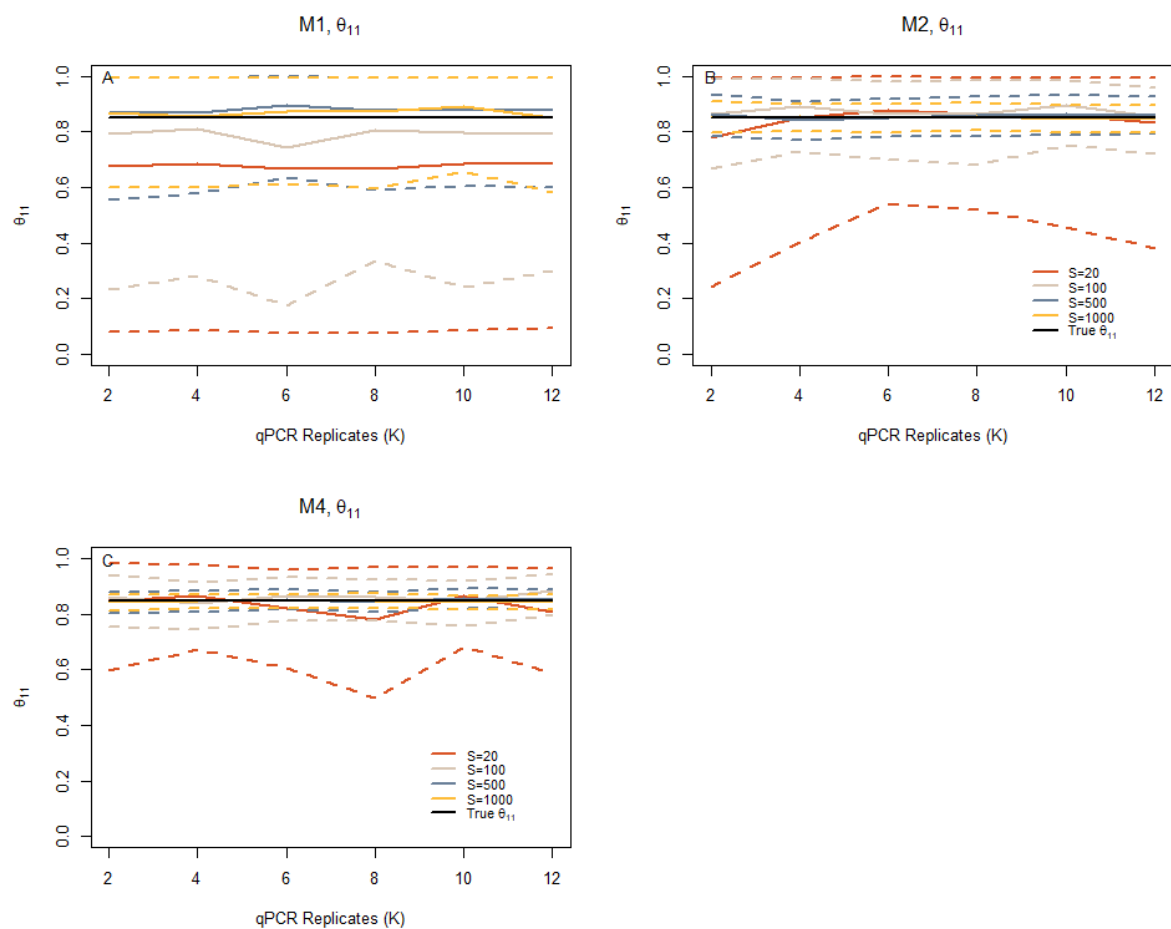
19 Figure S4 – Posterior mean ψ estimate (solid line) and 95% credible intervals (dashed lines)
 20 for each combination S ($S=20$, orange; $S=100$, grey; $S=500$, blue; $S=1000$, yellow), K (x-axis)
 21 and M ($M=1$, plot A; $M=2$, plot B; and $M=4$, plot C). The value used to simulate the data in
 22 each case is equal to 0.1.



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24 Figure S5 – Posterior mean θ_{10} estimate (solid line) and 95% credible intervals (dashed lines)
 25 for each combination S (S=20, orange; S=100, grey; S=500, blue; S=1000, yellow), K (x-axis)
 26 and M (M=1, plot A; M=2, plot B; and M=4, plot C). The value used to simulate the data in
 27 each case is equal to 0.01.

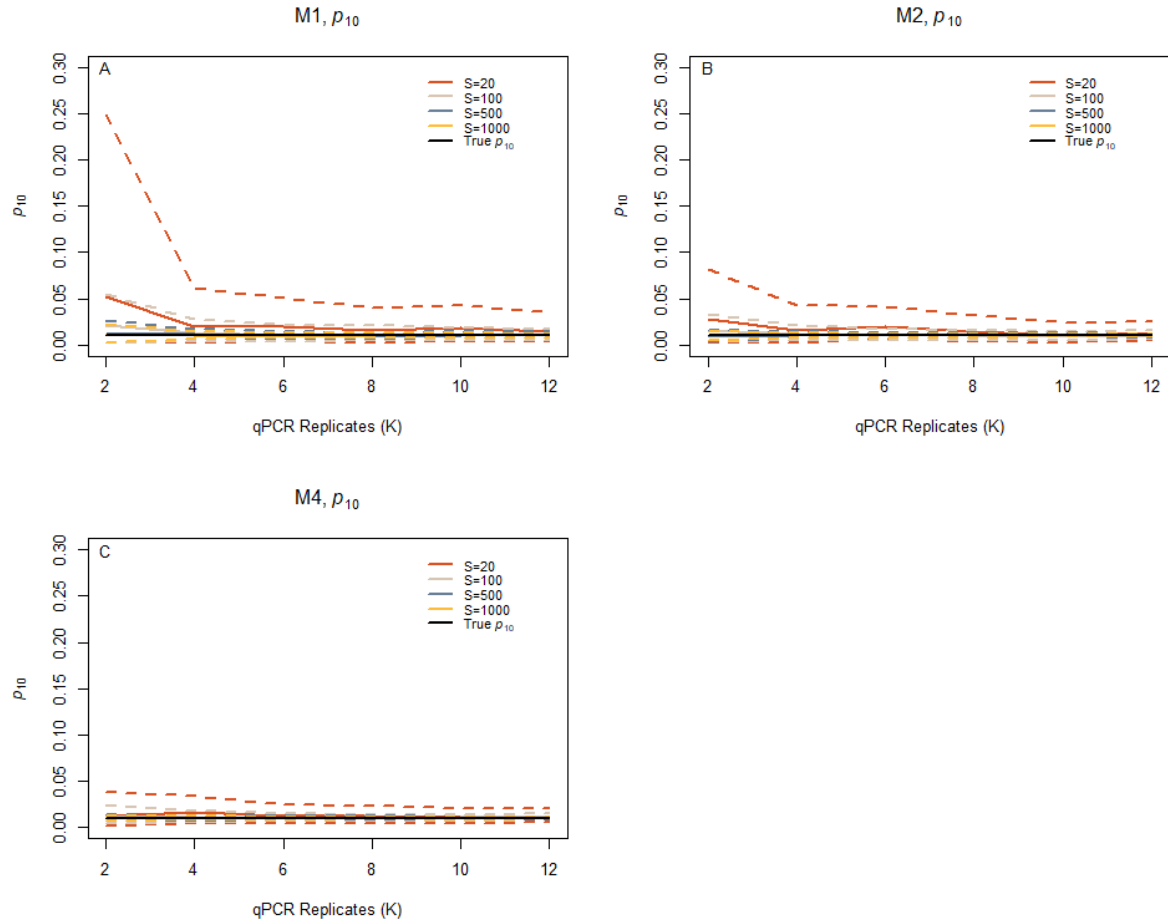
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30 Figure S6 – Posterior mean θ_{11} estimate (solid line) and 95% credible intervals (dashed lines)
 31 for each combination S ($S=20$, orange; $S=100$, grey; $S=500$, blue; $S=1000$, yellow), K (x-axis)
 32 and M ($M=1$, plot A; $M=2$, plot B; and $M=4$, plot C). The value used to simulate the data in
 33 each case is equal to 0.85.

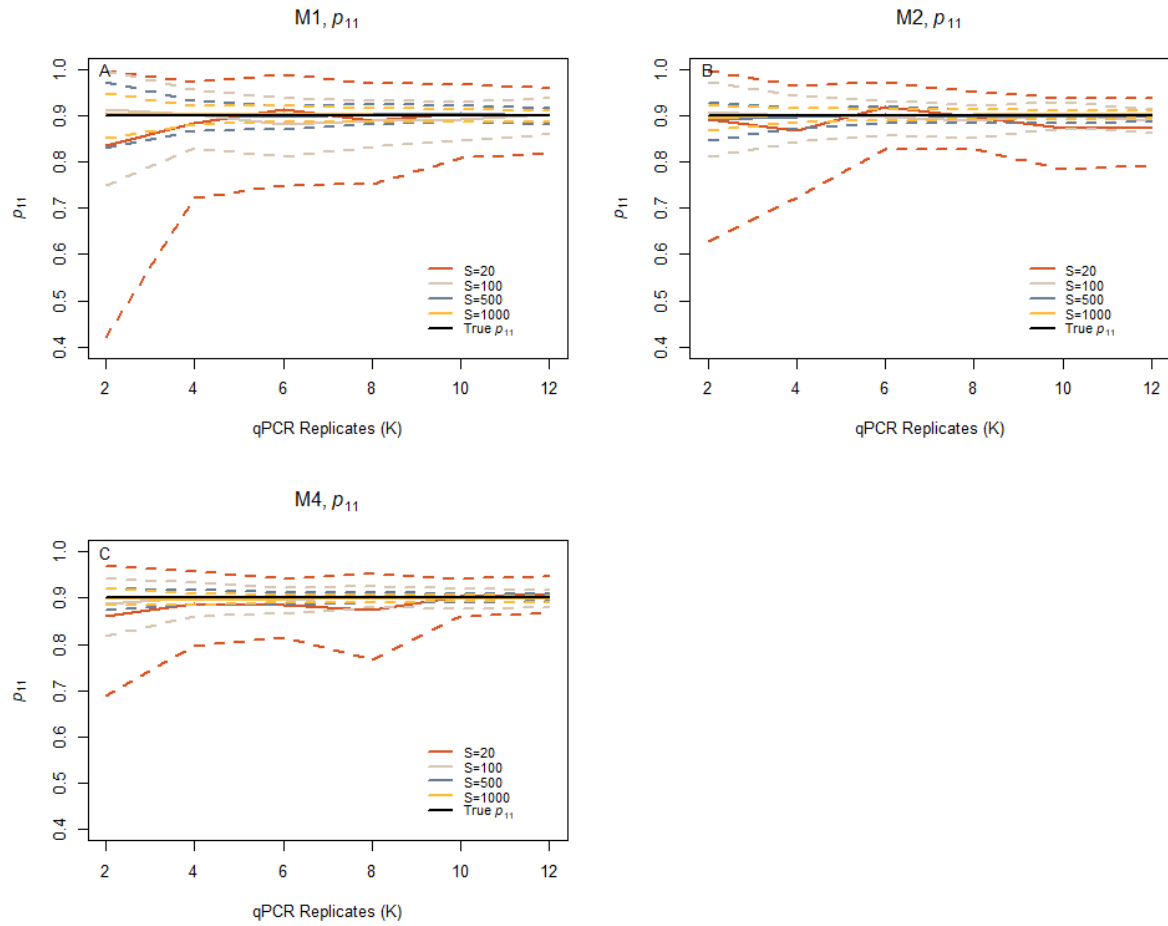
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36 Figure S7 – Posterior mean p_{10} estimate (solid line) and 95% credible intervals (dashed lines)
 37 for each combination S ($S=20$, orange; $S=100$, grey; $S=500$, blue; $S=1000$, yellow), K (x-axis)
 38 and M ($M=1$, plot A; $M=2$, plot B; and $M=4$, plot C). The value used to simulate the data in
 39 each case is equal to 0.01.

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42 Figure S8 – Posterior mean p_{11} estimate (solid line) and 95% credible intervals (dashed lines)
 43 for each combination S (S=20, orange; S=100, grey; S=500, blue; S=1000, yellow), K (x-axis)
 44 and M (M=1, plot A; M=2, plot B; and M=4, plot C). The value used to simulate the data in
 45 each case is equal to 0.9.

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