

DEVELOPING A NEW METHOD OF MEASURING ENTEROCOCCUS

Have We Been Wasting Money?

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Current methods of sampling Enterococcus bacteria cost about \$16 per sample using the Enterolert Tray method. We devised an alternate, far cheaper method employing the media broth of ENTEROLERT coupled with membrane filtration, to reduce costs by ~85%.



ENTEROLERT TRAY

- \$16/Sample
- Add growth media with fluorescent tag to samples
- Pour samples into the tray and seal
- Incubate at 40°C for 24-28 hours and count positive cells



MEMBRANE FILTRATION

- \$2.50/Sample
- Vacuum filter sample through a membrane
- Place membrane in growth media with fluorescent tag
- Incubate membrane at 40°C for 24 hours and
- Enumerate colonies



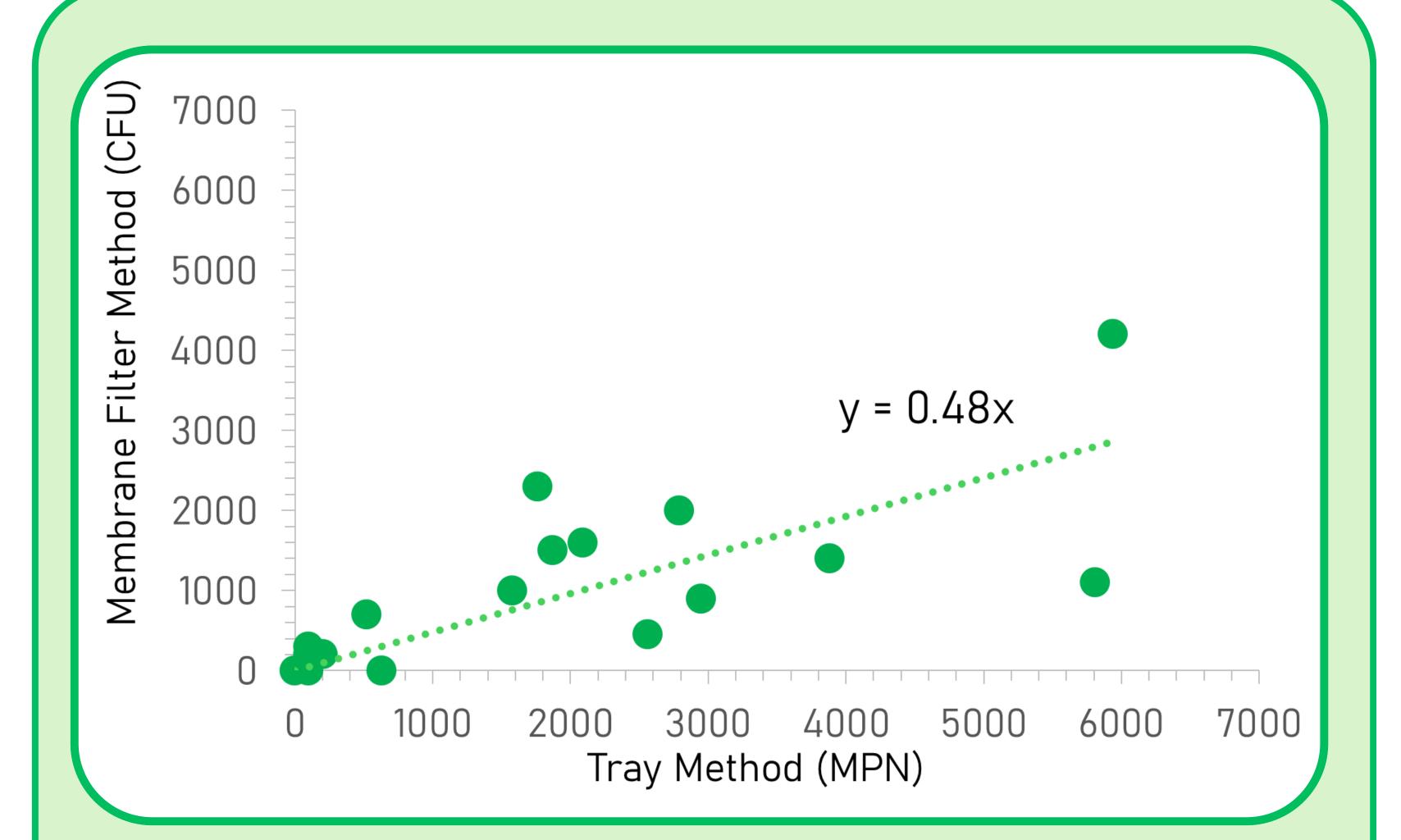


Figure 1. Comparison between the membrane filtration and Enterolert methods of measuring fecal coliform bacteria. Results indicate no statistically significant difference between the methods (p > 0.05, n = 18), supported by a moderately strong R-squared value of 0.56.

CONCLUSIONS

- Membrane is consistently lower but comparable!
- We would use this method in future years.
- More data is needed to determine consistency.

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