Interactive comment on “Study on the antibacterial activity of selected natural herbs and their application in water treatment” by P. S. Harikumar and C. M. Manjusha

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(1) The variability (standard deviation) that the authors report for the all bacteria tested is very low and very consistent, (much) lower and more consistent than in other inactivation studies with different types of disinfecting agents. The variability and consistency are better than to be expected from tests that employ a 3x3 MPN assay that produces (by nature) relatively rough estimates of the concentration. The authors should disclose the original MPN counts (or colony counts) and compare their variability to similar studies to make a convincing presentation of their results?

(A) The MPN count of one herb (Ocimum tenuiflorum) is shown below. Standard devi-
ation values were edited.

Concentration of Ocimum tenuiflorum herbal extract (ml) Total Coliform count 1 Total Coliform count 2 Initial count (Dilution done) Final count (Dilution done) Percentage reduction value Initial count (Dilution done) Final count (Dilution done) Percentage reduction value 2.5 $4600 \pm 0$ $2720 \pm 0$ 40.9 $4600 \pm 0$ $2720 \pm 0$ 40.9 5 $640 \pm 28$ $300 \pm 14$ 53.1 $600 \pm 28$ $280 \pm 14$ 53.3 7.5 $460 \pm 0$ $183 \pm 1$ 60.2 $460 \pm 0$ $182 \pm 1$ 60.4 10 $300 \pm 0$ $90 \pm 0$ 70 $300 \pm 0$ $90 \pm 0$ 70 12.5 $390 \pm 7$ $108 \pm 1$ 72.3 $400 \pm 7$ $110 \pm 1$ 72.5 15 $300 \pm 0$ $64 \pm 1$ 78.7 $300 \pm 0$ $63 \pm 1$ 78.9