Lobeck 2012

Sample dilutions were plated (200 L) on colistin naladixic acid (CNA) agar (BBL, Sparks, Md.), MacConkey agar (BBL, Sparks, Md.), and thallium sulfate‐crystal violet‐B toxin blood (TKT) agar medium

CNA

MacConkey

TKT

Black 2014

Sample preparation consisted of diluting material by mixing 25 g of bedding material with 225 g of 0.1% nonsterile peptone solution in a 1:10 dilution. The mixture was hand mixed until the bedding material was well suspended within the peptone solution. To determine total coliform and E. coli counts, further serial dilutions out to 1:104 were generated and plated to ensure countable plates, or plates with fewer than 200 cfu. Researchers then added 1 mL of the appropriate dilution, using a pipette, to 2 separate 3M Petrifilm E. coli/Coliform Count Plates (3M Microbiology Products, St. Paul, MN), and incubated the plates at 35°C for 24 h. Colony-forming units were counted manually, obtaining both a coliform and E. coli count. Streptococci count was determined by creating further serial dilutions out to 1:105 to ensure countable plates. Then, 50 μL of each dilution was added to 2 separate TKT agars (1 g of aesculin, 13 g of agar, 0.0013 g of crystal violet, 5 g of meat extract, 10 g of meat peptone, 5 g of sodium chloride, and 0.333 g of thallium sulfate, brought to 1,000 mL; with bovine blood added at 5% before pouring plates; pH adjusted to 7.5 ± 0.2) prepared in the laboratory and spiral plated (Eddy Jet; IUL Instruments I.K.S., Leerdam, the Netherlands) the diluted material onto the plate. Plates were incubated 48 h at 35°C, with colony-forming units counted automatically using a colony counter (Flash & Go; IUL Instruments I.K.S.). For staphylococci, further serial dilutions out to 1:106 were created and plated to ensure countable plates. One milliliter of each dilution was added to 2 separate BBL Columbia CNA agars (colistin and nalidixic acid agar; Becton, Dickinson and Co., Franklin Lakes, NJ) prepared according to manufacturer directions. The diluted material was spread across the plate surface using a smooth sterilized spreader. Plates were incubated 48 h at 35°C and then flooded with peroxide. Catalase-positive colonies were counted as staphylococci using a colony counter (Flash & Go; IUL Instruments I.K.S.). Counts of Bacillus spp. were ascertained by creating further serial dilutions out to 1:106 to ensure countable plates. Researchers added 1 mL of each dilution to 2 separate Difco MYP (mannitol-egg yolk-polymyxin B) agars (Becton, Dickinson and Co.) prepared according to the manufacturer directions, and spiral plated (Eddy Jet; IUL Instruments I.K.S.) the diluted material onto the plate. Incubation of MYP plates occurred at 35°C for 48 h, with colony-forming units counted automatically using a colony counter (Flash & Go, IUL Instruments I.K.S.). All bacterial counts were converted to a DM basis by dividing the wet matter basis count (cfu/g) by the moisture percentage of the sample, resulting in colony-forming units per grams of DM.

3M Petrifilm E. coli/coliform count plates

TKT

BBL

Difco MYP

Eckelkamp 2016

Countable plates were acquired through further serial dilution (102–105). Total coliforms were determined by addition of 1 mL of the appropriate dilution to 3 M Petrifilm Coliform Count Plates in duplicate (3 M Microbiology Products, St. Paul, MN), and incubation at 37 °C for 24 h. Klebsiella species were determined by addition of 1 mL of the appropriate dilution to each half of a MacConkey-inositol-carbenicillin (MCIC) agar (Becton, Dickinson and Company, Franklin Lakes, NJ) prepared according to manufacturer directions using an agar spreader. Colony forming units (cfu) were counted manually and averaged for each duplicate, obtaining a coliform and Klebsiella species count.

Researchers determined streptococci, staphylococci, and bacilli counts using TKT agar, Difco Staph 110, and Difco MYP Agar Mannitol-Egg Yolk Polymyxin B (Becton, Dickinson and Company, Franklin Lakes, NJ), respectively, prepared in the lab according to manufacturer instructions. The appropriate dilution (102–103) was spiral plated onto two plates of each media type (Eddy Jet, IUL Instruments, I.L.S., Leerdam, The Netherlands). Plates were incubated for 48 h at 35 °C. Colony forming units were counted automatically using a colony counter (Flash & Go, IUL Instruments, I.K.S., Leerdam, The Netherlands).

3M Petrifilm coliform count plates

MCIC

TKT

Difco Staph 110

Difco MYP