FEPTU
Food & Environmental Proficiency Testing Unit
Operated by UK Health Security Agency

# Summary of Results

## External Quality Assessment of Food Microbiology

## Standard Scheme

**Distribution Number: 380** **Sample Numbers: S0797, S0798**

| | |
|---|---|
| Distribution Date: | **January 2025** |
| Results Due: | **07 March 2025** |
| Report Date: | **12 March 2025** |
| Samples prepared and quality control tested by: | **Divya George**<br>**Afifa Halim**<br>**Nafeesa Hussain**<br>**Sabine Naujokat**<br>**Zak Prior**<br>**Jake Videlefsky** |
| Data analysed by: | **Joanna Donn**<br>**Nita Patel** |
| Report compiled by: | **Joanna Donn**<br>**Nita Patel** |
| Authorised by: | **Nita Patel** |



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For further information on the scheme please refer to:
**Scheme Guide:** https://www.feptu.org.uk/schemes/scheme-guide/

**Guide to Scoring and Statistics:** https://www.feptu.org.uk/schemes/scoring/

**General guidance for z-scores:**
Participants' enumeration results are converted into z-scores using the following formula:

$$Z = \frac{(x_i - X_{pt})}{\sigma_{pt}}$$

$x_i$ = participants' result (expressed as a $\log_{10}$ value)
$X_{pt}$ = assigned value (participants' consensus median (expressed as a $\log_{10}$ value))
$\sigma_{pt}$ = the fixed standard deviation for the examination (calculated by FEPTU)

The $\sigma_{pt}$-value expresses the acceptable difference between the individual participant's result and the participants' consensus median. The $\sigma_{pt}$-value used for calculating z-scores for all parameters in the Standard Scheme is 0.35. A guide to interpreting z-scores follows, although laboratories must interpret their scores in the context of their own laboratory situation:

| | |
|---|---|
| z = -1.99 to +1.99 | satisfactory |
| z = -2 to -2.99 or +2 to +2.99 | questionable |
| z= < -3.00 or > + 3.00 | unsatisfactory |

It is usually recommended that z-scores exceeding +/-2 are investigated to establish the possible cause. As a general rule, UKHSA recommends that all questionable and unsatisfactory results are investigated.

**FEPTU Quality control:** To demonstrate homogeneity of the sample, a minimum of 10 freeze-dried vials, selected randomly from a batch, are tested in duplicate for parameters requiring enumeration and 10 freeze-dried vials are examined for pathogen detection.

To demonstrate stability of the sample, a minimum of six vials, selected randomly from a batch, are examined throughout the distribution period, either for enumeration or pathogen detection.

FEPTU results are determined using methods based on ISO methods and are included in the 'intended results' letters which provide guidance for participants regarding the assigned values.

The FEPTU results are used for guidance in the preliminary intended results notification, letters are posted on the website immediately after every distribution; electronic notification of their availability is sent to all participants

Refer to section 19.0 of the Scheme Guide if you have experienced difficulties with any of the examinations.

https://www.feptu.org.uk/schemes/scheme-guide/

All participants are reminded that reporting an incorrect or incomplete identification of pathogens from food samples could have serious public health implications. Similarly, the levels of micro-organisms reported in the sample may affect the subsequent outcome for the product.

**Participants are reminded that the purpose of scoring is to draw attention to incorrect or outlying results. The results, as summarised in the performance assessment sheet included in this report, provide a more effective indication of on-going problems with food microbiology examinations.**

The bar charts in this report are compiled using the processes outlined in the Guide to Scoring Systems and Statistics for the allocation of UKHSA scores. Z-scores are included on the sample-specific pages only; the relevant sections will be left blank if a z-score does not apply.

Please contact FEPTU staff for advice and information:

| | |
|---|---|
| **Repeat samples** | Carmen Gomes or Kermin Daruwalla |
| **Data Analysis** | Nita Patel |
| **Microbiological advice** | Nita Patel or Zak Prior |
| **General comments and complaints** | Nita Patel or Zak Prior |
| **Scheme consultants** | Melody Greenwood |
| **Scheme Co-ordinator** | Nita Patel |

**Tel:** **+44 (0)20 8327 7119**
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FEPTU's website

**Accreditation:** UKHSA Food EQA Scheme for Standard is accredited by the United Kingdom Accreditation Service (UKAS) to ISO/IEC 17043:2010.

UKAS PROFICIENCY TESTING
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## Sample: S0797

**Contents:** *Staphylococcus aureus* (4.7x10³) (wild strain), *Listeria monocytogenes* (6x8x10³) (wild strain), *Listeria welshimeri* (8.2x10³) (wild strain), *Escherichia coli* (7.9x10³) (wild strain), *Pantoea agglomerans* (4.0x10²) (wild strain), *Lactobacillus plantarum* (2.8x10⁴) (wild strain)

All levels are presented as colony forming units (cfu) per ml reconstituted sample

All levels are presented as colony forming units (cfu) per ml reconstituted sample

**Expected Results:**

| Examination | Expected Result | Your Result | Score | Z-score |
|---|---|---|---|---|
| Presumptive *B.cereus* | <10 cfu g $^{-1}$ | | | |
| Coagulase-positive staphylococci | 1.3x10³ - 1.3x10⁴ cfu g $^{-1}$ | | | |
| *Listeria* spp. (including *L.mono*) | 3.8x10³ - 3.8x10⁴ cfu g $^{-1}$ | | | |
| *L.monocytogenes* | 2.2x10³ - 2.2x10⁴ cfu g $^{-1}$ | | | |
| Aerobic colony count | 9.1x10³ - 9.1x10⁴ cfu g $^{-1}$ | | | |
| Coliform | 1.6x10³ - 1.6x10⁴ cfu g $^{-1}$ | | | |

| **Presumptive *B.cereus*** | |
|---|---|
| Total participants reporting for Presumptive *B.cereus* | 85 |
| Participants reporting correctly | 82 (96%) |

| **Coagulase-positive staphylococci** | |
|---|---|
| Total participants reporting for Coagulase-positive staphylococci | 96 |
| Total participants enumerating Coagulase-positive staphylococci | 95 |
| Participants reporting a low censored value | 1 |
| Assigned value (participants' median) | 4.2x10³ cfu g$^{-1}$ (3.62 $\log_{10}$) |
| Uncertainty of assigned value ($U(X_{pt})$=$\log_{10}$ cfu g$^{-1}$) | 0.02 |
| No. of outlying counts | 1 (1 low) |
| Participants mean | 4.2x10³ cfu g$^{-1}$ (3.62 $\log_{10}$) |
| Standard deviation of participants results * | 0.13 $\log_{10}$ cfu g$^{-1}$ |
| FEPTU QC medians<br>▪ ISO 6888-1:2021 | 4.7x10³ cfu g$^{-1}$ (3.67 $\log_{10}$) |

| *Listeria* spp. (including *L.mono*) | |
|---|---|
| Total participants reporting for *Listeria* spp. (including *L.mono*) | 84 |
| Total participants enumerating *Listeria* spp. (including *L.mono*) | 78 |
| Assigned value (participants' median) | $1.2x10^4$ cfu $g^{-1}$ (4.08 $log_{10}$) |
| Uncertainty of assigned value ($U(X_{pt})$=$log_{10}$ cfu $g^{-1}$) | 0.02 |
| No. of outlying counts | 5 (4 low / 1 high) |
| Participants mean | $1.2x10^4$ cfu $g^{-1}$ (4.08 $log_{10}$) |
| Standard deviation of participants results * | 0.15 $log_{10}$ cfu $g^{-1}$ |
| FEPTU QC medians<br>▪ ISO 11290-2:2017 | <br>$1.5x10^4$ cfu $g^{-1}$ (4.18 $log_{10}$) |

| *L.monocytogenes* | |
|---|---|
| Total participants reporting for *L.monocytogenes* | 96 |
| Total participants enumerating *L.monocytogenes* | 91 |
| Assigned value (participants' median) | $7.0x10^3$ cfu $g^{-1}$ (3.85 $log_{10}$) |
| Uncertainty of assigned value ($U(X_{pt})$=$log_{10}$ cfu $g^{-1}$) | 0.03 |
| No. of outlying counts | 4 (4 low) |
| Participants mean | $6.8x10^3$ cfu $g^{-1}$ (3.83 $log_{10}$) |
| Standard deviation of participants results * | 0.2 $log_{10}$ cfu $g^{-1}$ |
| FEPTU QC medians<br>▪ ISO 11290-2:2017 | <br>$6.9x10^3$ cfu $g^{-1}$ (3.84 $log_{10}$) |

| Aerobic colony count | |
|---|---|
| Total participants reporting for Aerobic colony count | 82 |
| Assigned value (participants' median) | $2.9x10^4$ cfu $g^{-1}$ (4.46 $log_{10}$) |
| Uncertainty of assigned value ($U(X_{pt})$=$log_{10}$ cfu $g^{-1}$) | 0.02 |
| No. of outlying counts | 3 (1 low / 2 high) |
| Participants mean | $2.8x10^4$ cfu $g^{-1}$ (4.44 $log_{10}$) |
| Standard deviation of participants results * | 0.16 $log_{10}$ cfu $g^{-1}$ |
| FEPTU QC median | $2.6x10^4$ cfu $g^{-1}$ (4.41 $log_{10}$) |

| Coliform | |
|---|---|
| Total participants reporting for Coliform | 68 |
| Assigned value (participants' median) | $5.0x10^3$ cfu $g^{-1}$ (3.7 $log_{10}$) |
| Uncertainty of assigned value ($U(X_{pt})$=$log_{10}$ cfu $g^{-1}$) | 0.03 |
| No. of outlying counts | 4 (3 low / 1 high) |
| Participants mean | $4.7x10^3$ cfu $g^{-1}$ (3.68 $log_{10}$) |
| Standard deviation of participants results * | 0.2 $log_{10}$ cfu $g^{-1}$ |
| FEPTU QC median | $8.1x10^3$ cfu $g^{-1}$ (3.91 $log_{10}$) |

| | |
|---|---|
| Total sent samples | 105 |
| Non-returns | 2 |
| Not examined | 3 |

The fixed standard deviation value ($\sigma_{pt}$ value) used for calculation of the z-scores is **0.35** for all parameters.

* Robust $S^*$ based on median absolute deviation about the participants' median (*MADe*).

## Sample: S0798

**Contents:** *Bacillus cereus* (4.2x10$^{2}$) (wld strain), *Staphylococcus sciuri* (5.5x10$^{3}$) (wild strain), *Enterococcus faecalis* (1.8x10$^{4}$) (wild strain), *Providencia rettgeri* (1.9x10$^{4}$) (NCTC 7475)

All levels are presented as colony forming units (cfu) per ml reconstituted sample

All levels are presented as colony forming units (cfu) per ml reconstituted sample

**Expected Results:**

| Examination | Expected Result | Your Result | Score | Z-score |
|---|---|---|---|---|
| Presumptive *B.cereus* | 1.3x10$^{2}$ - 1.3x10$^{3}$ cfu g $^{-1}$ | | | |
| Coagulase-positive staphylococci | <10 cfu g $^{-1}$ | | | |
| *Listeria* spp. (including *L.mono*) | <10 cfu g $^{-1}$ | | | |
| *L.monocytogenes* | <10 cfu g $^{-1}$ | | | |
| Aerobic colony count | 8.9x10$^{4}$ - 8.9x10$^{5}$ cfu g $^{-1}$ | | | |
| Coliform | <10 cfu g $^{-1}$ | | | |

| **Presumptive *B.cereus*** | |
|---|---|
| Total participants reporting for Presumptive *B.cereus* | 71 |
| Total participants enumerating Presumptive *B.cereus* | 69 |
| Participants reporting a low censored value | 2 |
| Participants reporting a high censored value | 1 |
| Assigned value (participants' median) | 4.0x10$^{2}$ cfu g$^{-1}$ (2.6 log$_{10}$) |
| Uncertainty of assigned value ($U(X_{pt})$=log$_{10}$ cfu g$^{-1}$) | 0.03 |
| No. of outlying counts | 9 (4 low / 5 high) |
| Participants mean | 4.0x10$^{2}$ cfu g$^{-1}$ (2.6 log$_{10}$) |
| Standard deviation of participants results * | 0.23 log$_{10}$ cfu g$^{-1}$ |
| FEPTU QC medians<br>▪ ISO 7932:2004 | 4.3x10$^{2}$ cfu g$^{-1}$ (2.63 log$_{10}$) |

| **Coagulase-positive staphylococci** | |
|---|---|
| Total participants reporting for Coagulase-positive staphylococci | 81 |
| Participants reporting correctly | 72 (89%) |

| *Listeria* spp. (including *L.mono*) | |
|---|---|
| Total participants reporting for *Listeria* spp. (including *L.mono*) | 69 |
| Participants reporting correctly | 63 (91%) |

| *L.monocytogenes* | |
|---|---|
| Total participants reporting for *L.monocytogenes* | 82 |
| Participants reporting correctly | 81 (99%) |

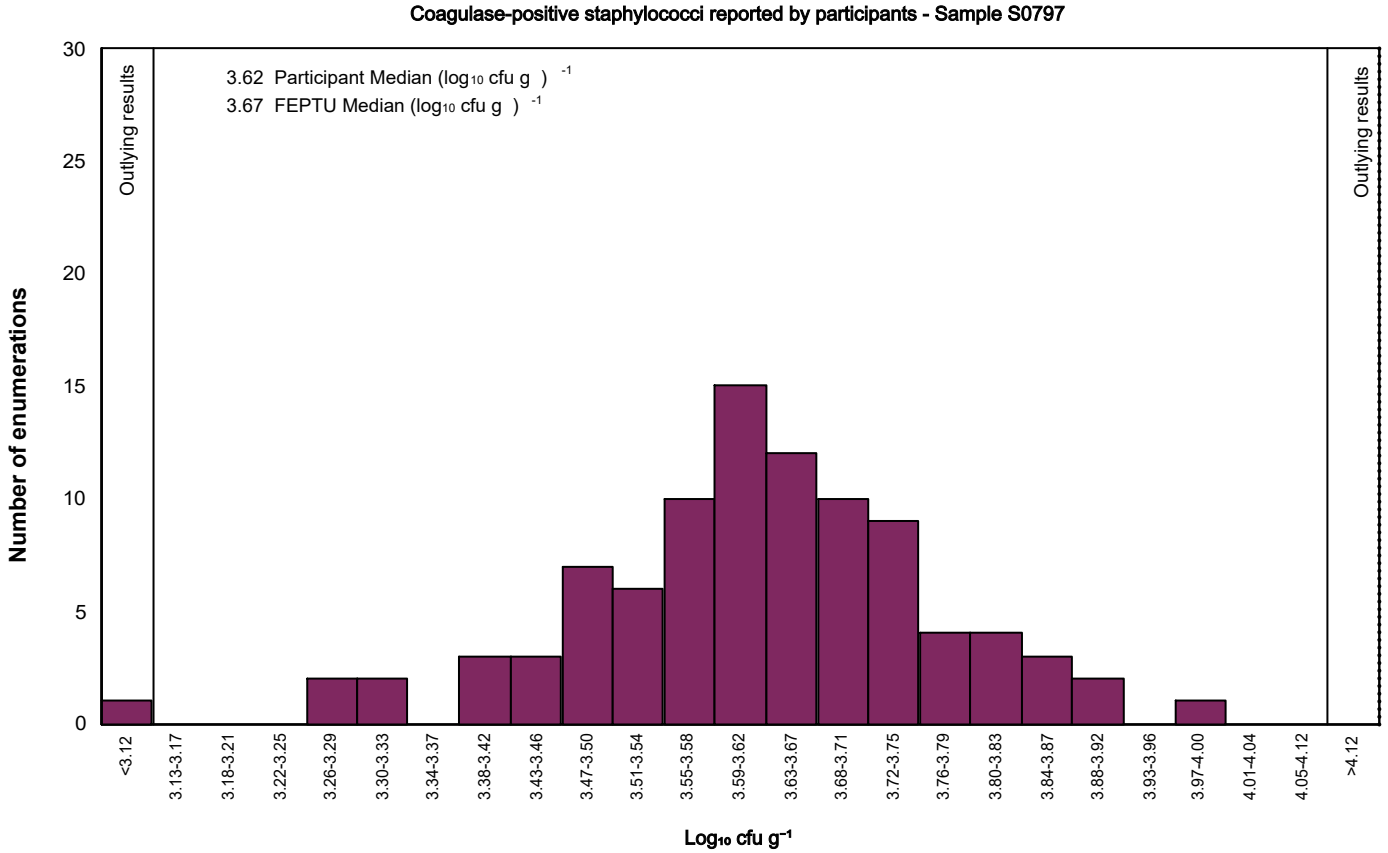
| Aerobic colony count | |
|---|---|
| Total participants reporting for Aerobic colony count | 83 |
| Assigned value (participants' median) | $2.8 \times 10^5$ cfu $g^{-1}$ (5.45 $\log_{10}$) |
| Uncertainty of assigned value ($U(X_{pt})$=$\log_{10}$ cfu $g^{-1}$) | 0.04 |
| No. of outlying counts | 6 (4 low / 2 high) |
| Participants mean | $2.9 \times 10^5$ cfu $g^{-1}$ (5.46 $\log_{10}$) |
| Standard deviation of participants results * | 0.28 $\log_{10}$ cfu $g^{-1}$ |
| FEPTU QC median | $2.6 \times 10^5$ cfu $g^{-1}$ (5.41 $\log_{10}$) |

| Coliform | |
|---|---|
| Total participants reporting for Coliform | 56 |
| Participants reporting correctly | 33 (59%) |

| | |
|---|---|
| Total sent samples | 105 |
| Non-returns | 2 |
| Not examined | 18 |

The fixed standard deviation value ($\sigma_{pt}$ value) used for calculation of the z-scores is **0.35** for all parameters.

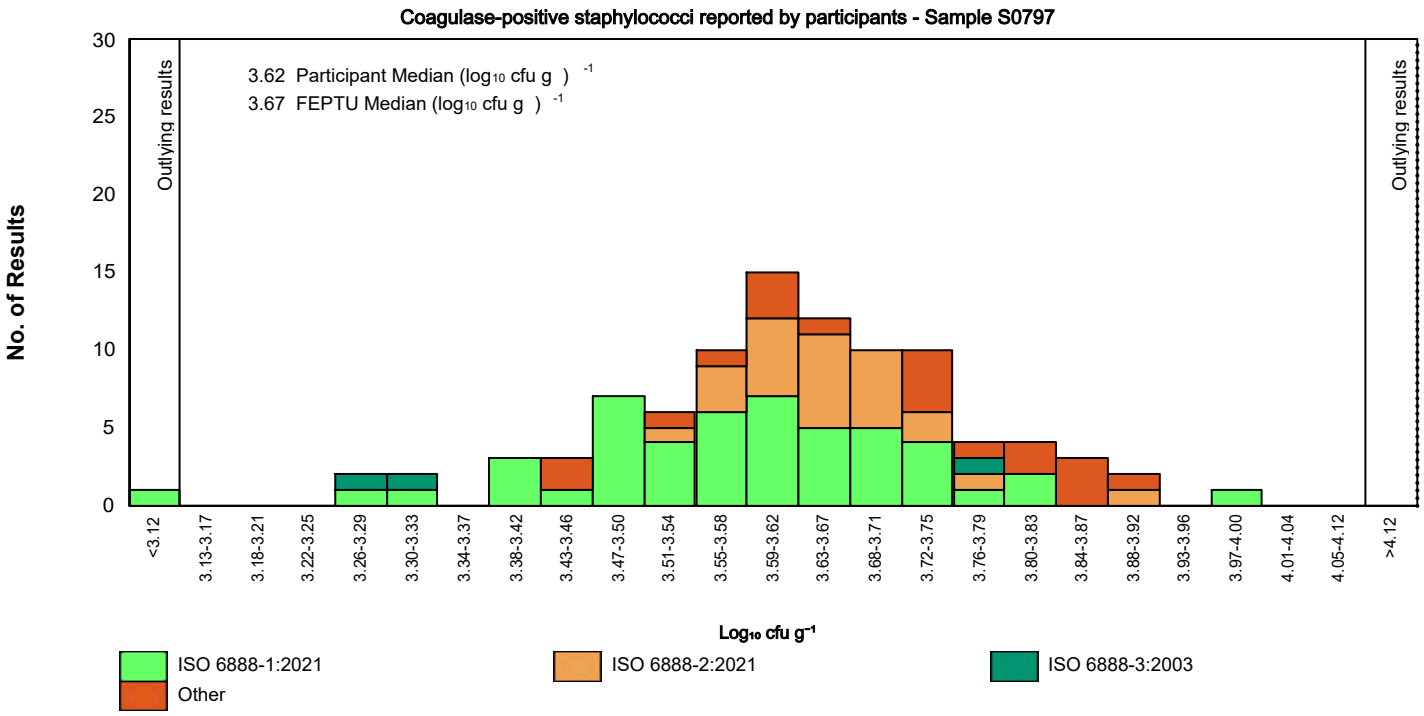
* Robust $S^*$ based on median absolute deviation about the participants' median (*MADe*).

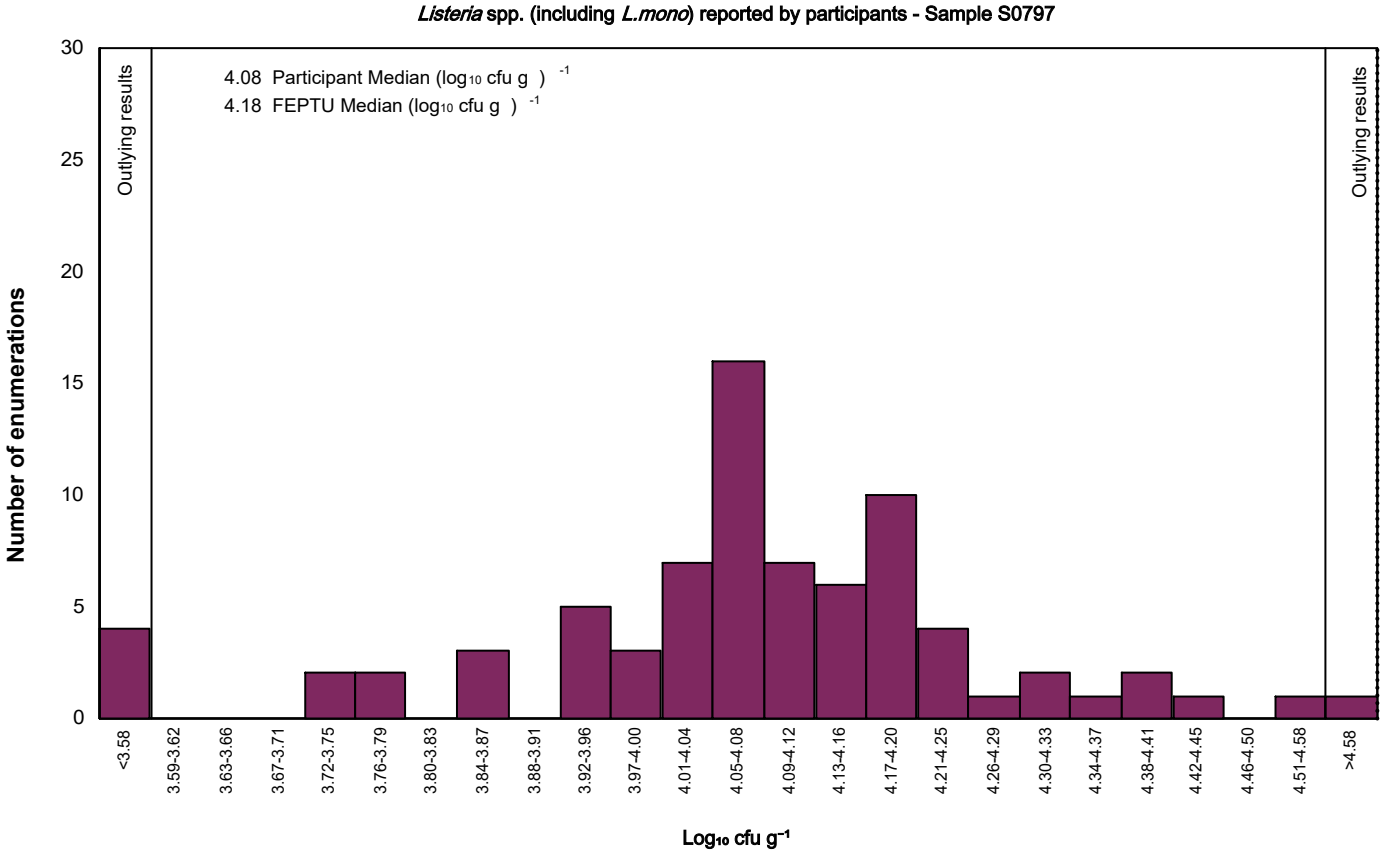



## Method based presentation

**S0797 : Coagulase-positive staphylococci** **FEPTU Method: ISO 6888-1:2021**

| Method | Number of Results | Excluded Results | Percentage of the total | Median ($Log_{10}$ cfu $g^{-1}$) | Robust *S** ($Log_{10}$ cfu $g^{-1}$) | Range Reported ($Log_{10}$ cfu $g^{-1}$) |
|---|---|---|---|---|---|---|
| ISO 6888-1:2021 | 49 | 0 | 51 | 3.59 | 0.13 | 2.62 - 3.98 |
| ISO 6888-2:2021 | 24 | 0 | 25 | 3.66 | 0.06 | 3.51 - 3.89 |
| ISO 6888-3:2003 | 3 | 0 | 3 | | | - |
| Other | 19 | 1 | 20 | 3.72 | 0.15 | 3.44 - 3.89 |

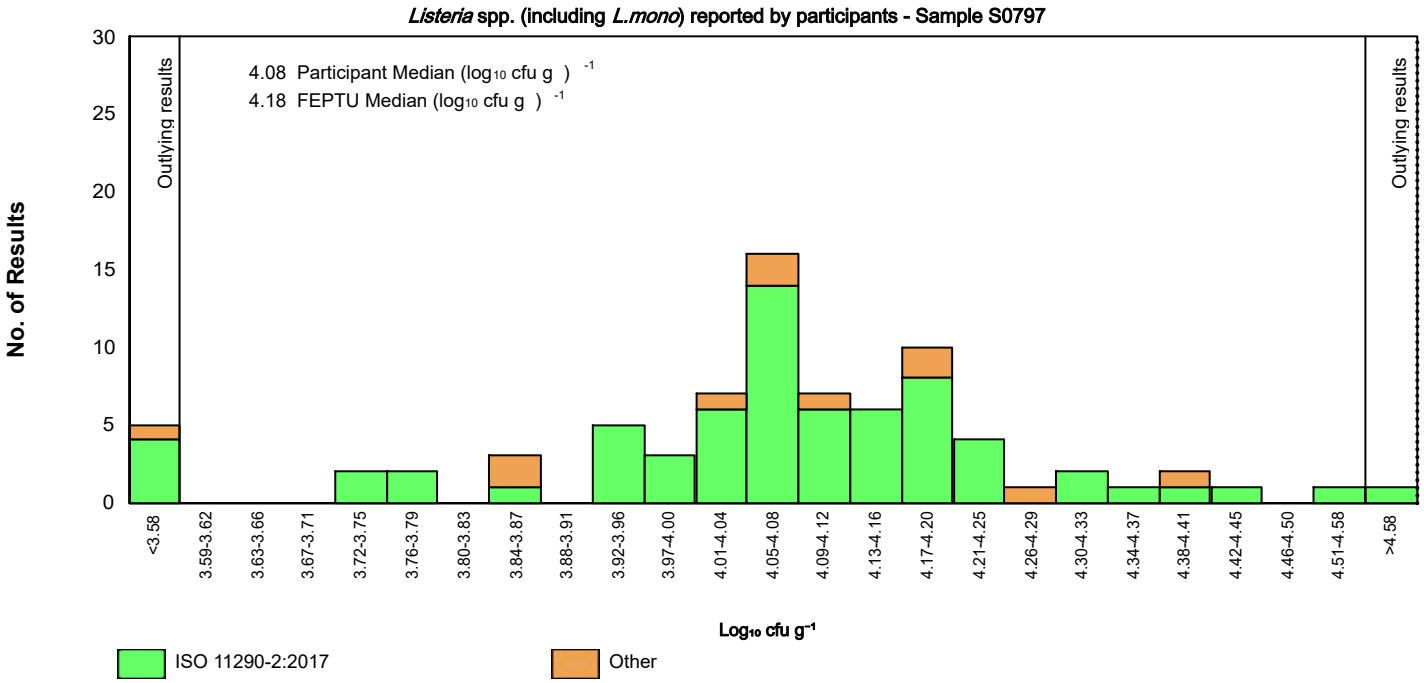


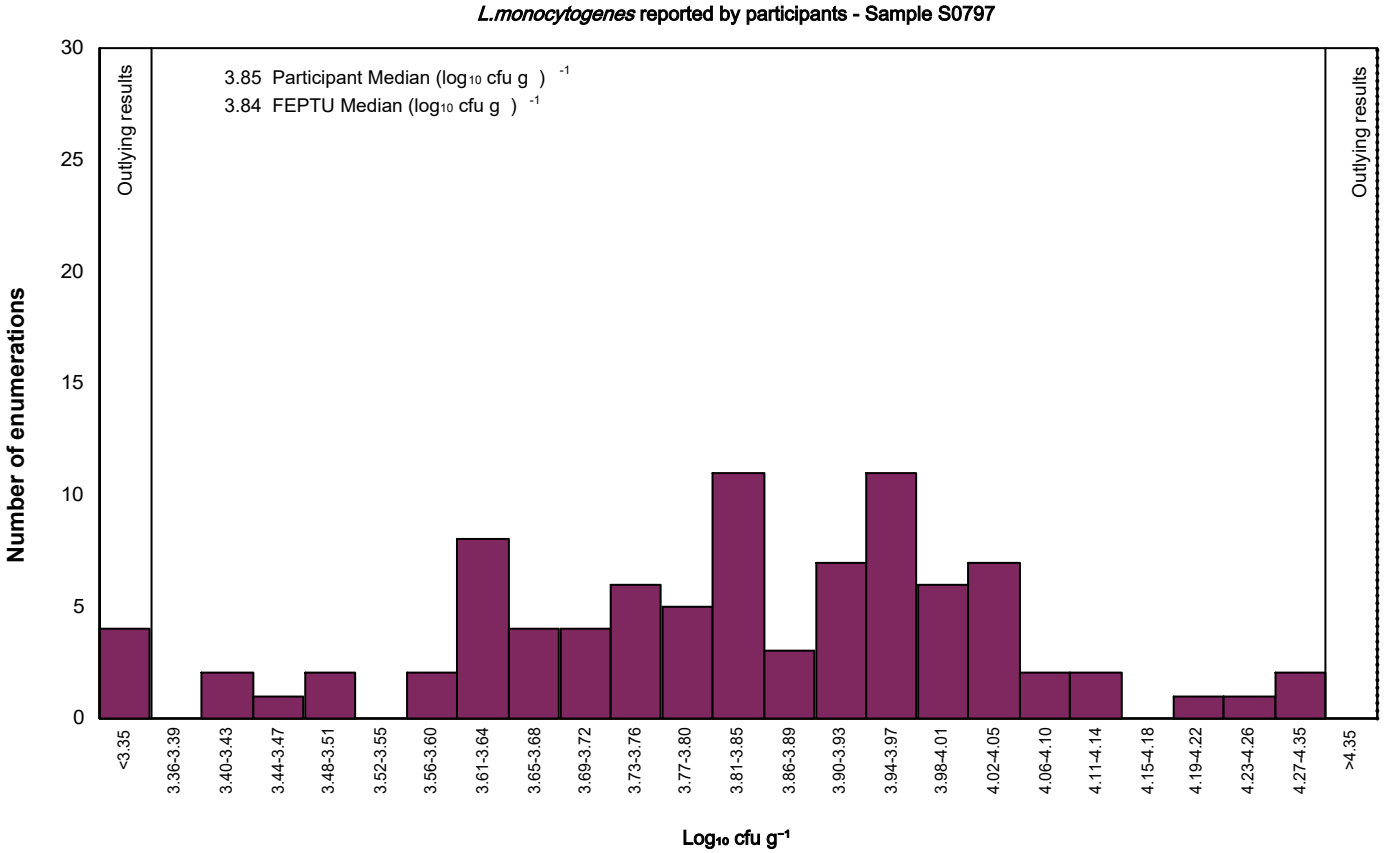



## Method based presentation

**S0797 : *Listeria* spp. (including *L.mono*)** **FEPTU Method: ISO 11290-2:2017**

| Method | Number of Results | Excluded Results | Percentage of the total | Median ($Log_{10}$ cfu $g^{-1}$) | Robust *S** ($Log_{10}$ cfu $g^{-1}$) | Range Reported ($Log_{10}$ cfu $g^{-1}$) |
|---|---|---|---|---|---|---|
| ISO 11290-2:2017 | 68 | 0 | 86 | 4.08 | 0.15 | 2.86 - 5.10 |
| Other | 11 | 0 | 13 | 4.04 | 0.21 | 3.51 - 4.40 |

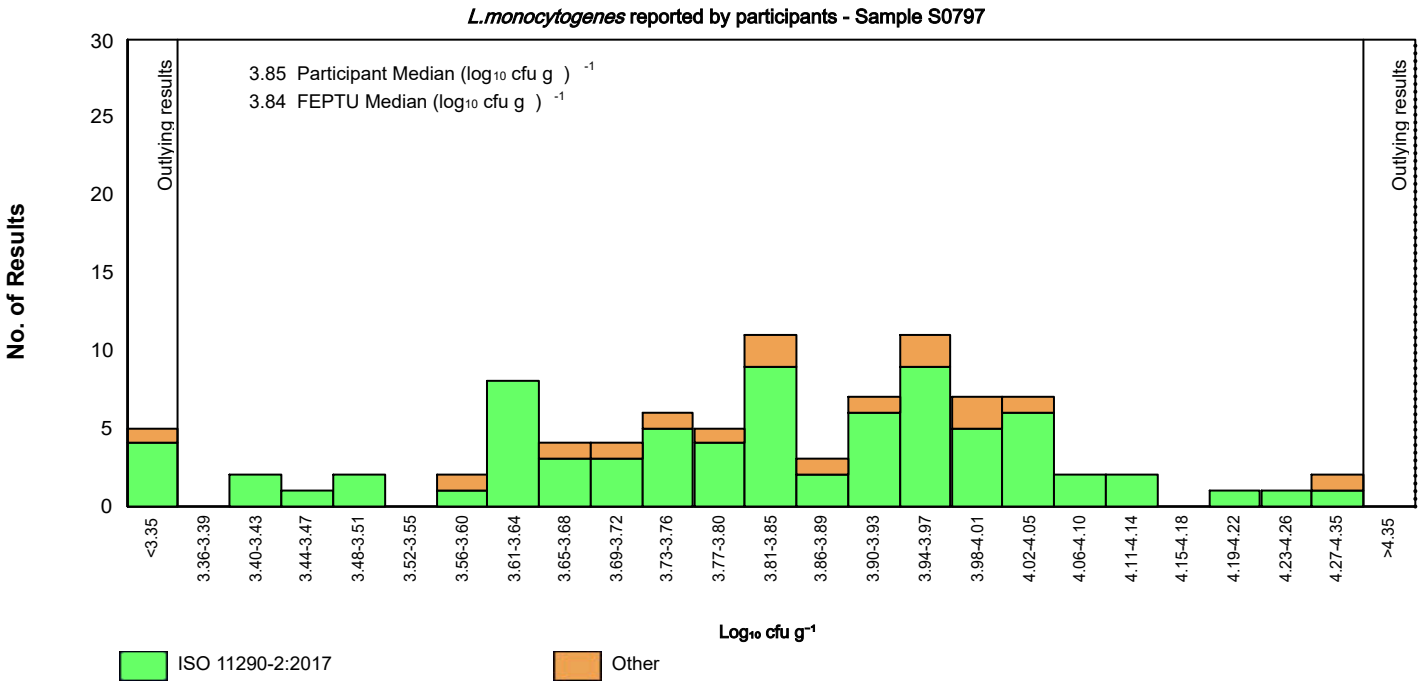


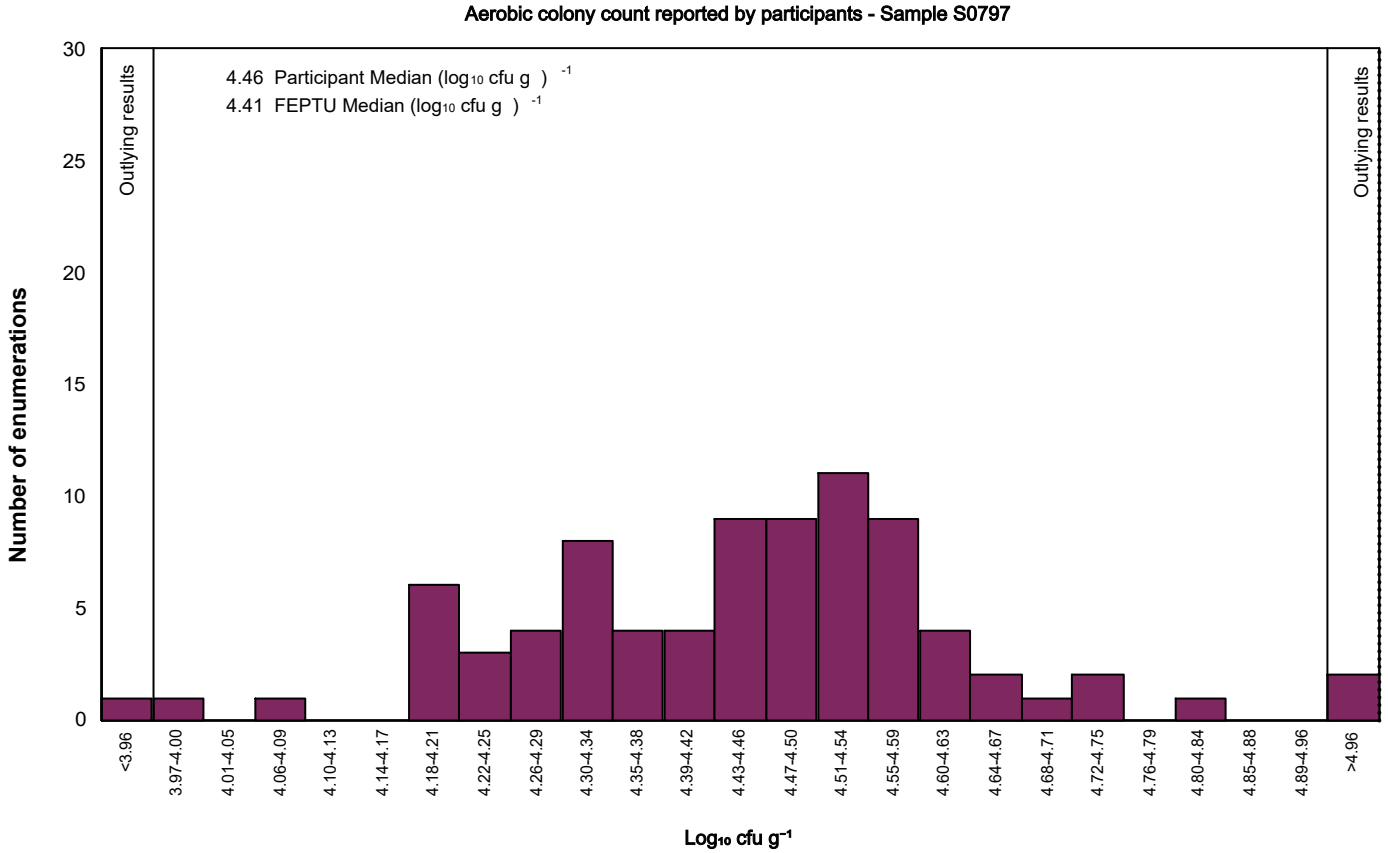



## Method based presentation

**S0797 : *L.monocytogenes*** **FEPTU Method: ISO 11290-2:2017**

| Method | Number of Results | Excluded Results | Percentage of the total | Median ($Log_{10}$ cfu $g^{-1}$) | Robust *S** ($Log_{10}$ cfu $g^{-1}$) | Range Reported ($Log_{10}$ cfu $g^{-1}$) |
|---|---|---|---|---|---|---|
| ISO 11290-2:2017 | 77 | 0 | 82 | 3.85 | 0.20 | 2.77 - 4.32 |
| Other | 16 | 0 | 17 | 3.84 | 0.19 | 3.04 - 4.32 |



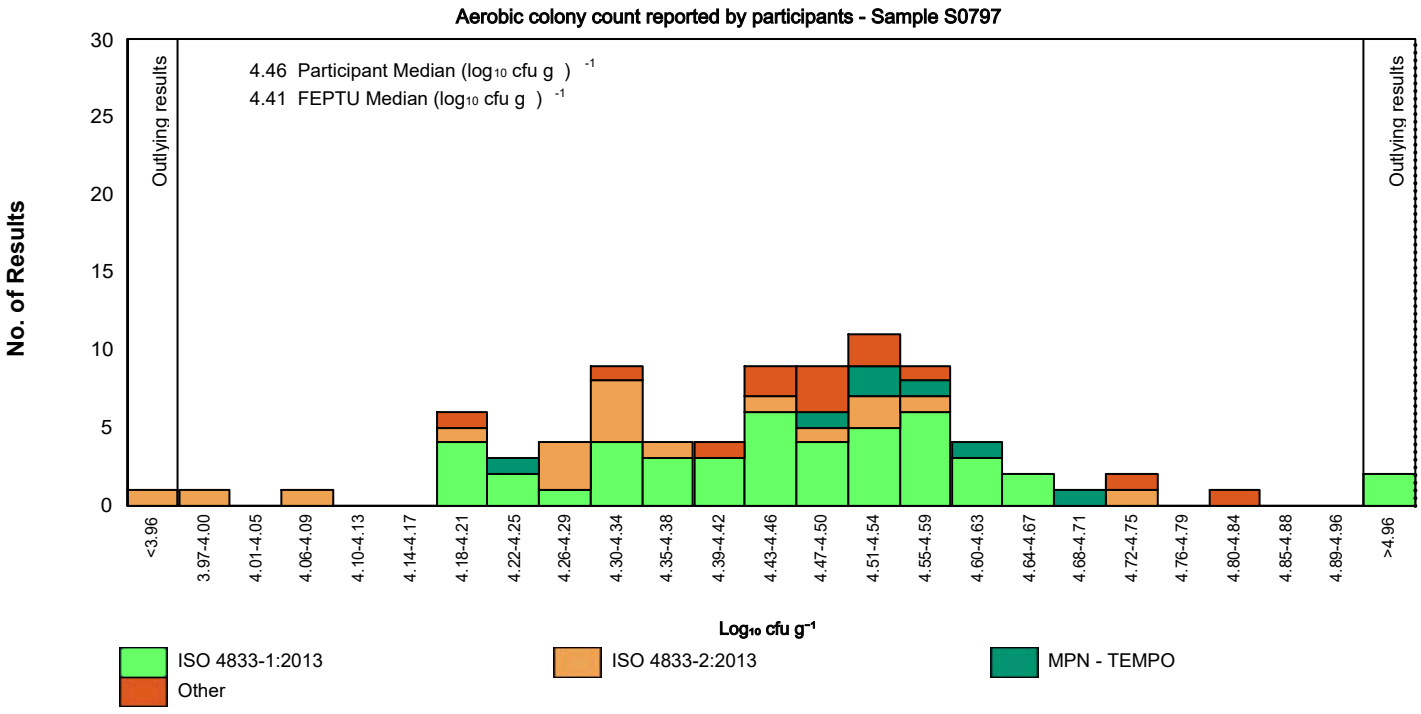


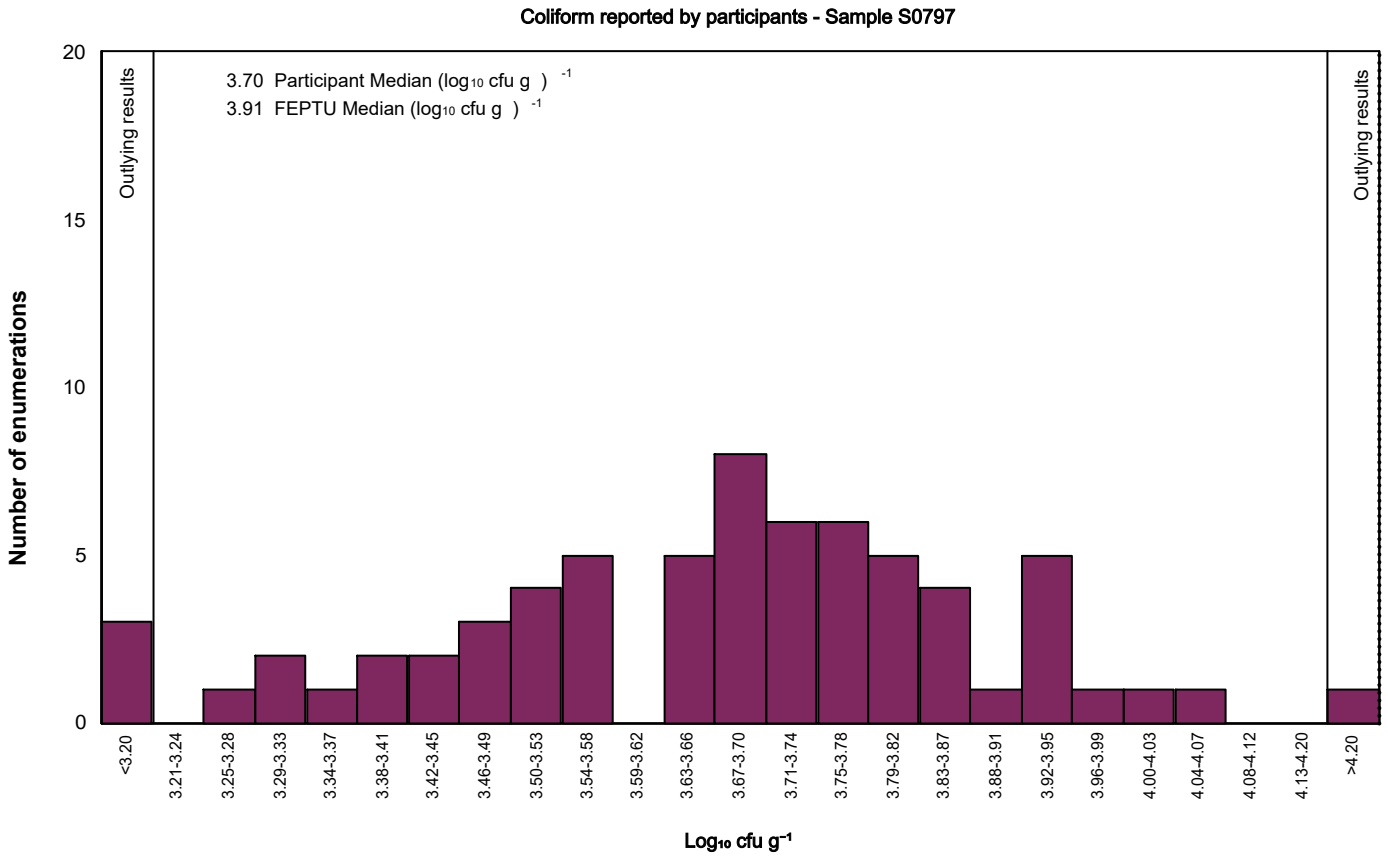

## Method based presentation

S0797 : Aerobic colony count

FEPTU Method: ISO 4833-1:2013

| Method | Number of Results | Excluded Results | Percentage of the total | Median ($Log_{10}$ cfu $g^{-1}$) | Robust *S** ($Log_{10}$ cfu $g^{-1}$) | Range Reported ($Log_{10}$ cfu $g^{-1}$) |
|---|---|---|---|---|---|---|
| ISO 4833-1:2013 | 45 | 0 | 54 | 4.45 | 0.15 | 4.18 - 6.32 |
| ISO 4833-2:2013 | 18 | 0 | 21 | 4.33 | 0.20 | 3.94 - 4.75 |
| MPN - TEMPO | 7 | 0 | 8 | | | - |
| Other | 13 | 0 | 15 | 4.48 | 0.07 | 4.19 - 4.82 |

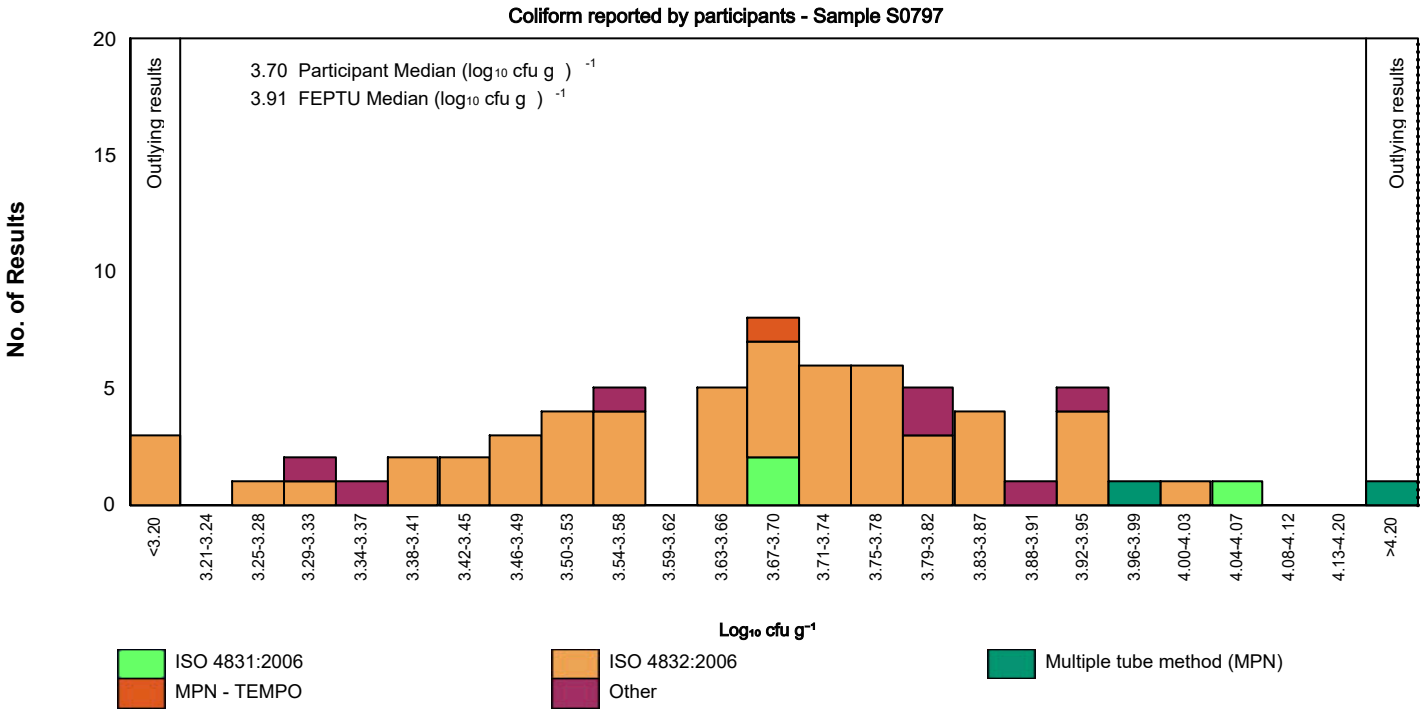





## Method based presentation

**S0797 : Coliform** **FEPTU Method: ISO 4832:2006**

| Method | Number of Results | Excluded Results | Percentage of the total | Median ($Log_{10}$ cfu $g^{-1}$) | Robust *S** ($Log_{10}$ cfu $g^{-1}$) | Range Reported ($Log_{10}$ cfu $g^{-1}$) |
|---|---|---|---|---|---|---|
| ISO 4831:2006 | 3 | 0 | 4 | | | - |
| ISO 4832:2006 | 54 | 0 | 80 | 3.67 | 0.19 | 2.63 - 4.00 |
| Multiple tube method (MPN) | 2 | 0 | 2 | | | - |
| MPN - TEMPO | 1 | 0 | 1 | | | - |
| Other | 7 | 0 | 10 | | | - |



## Sample S0797

| Presumptive *B.cereus* Method | Presumptive *B.cereus* Media | Presumptive *B.cereus* Incubation | Count reported | Count censored values |
|---|---|---|---|---|
| | | 30ºC/18-48h | 0 | 0 |
| | Bacillus cereus selective agar (MYP) | 30ºC/18-48h | 0 | 0 |
| ISO 7932:2004 | Bacillus cereus selective agar (MYP) | 30ºC/18-48h | 1 | 54 |
| ISO 7932:2004 | Bacillus cereus selective agar (MYP) | 37ºC/18-48h | 0 | 1 |
| ISO 7932:2004 | Bacillus cereus selective agar (PEMBA formulation) | 30ºC/18-48h | 0 | 1 |
| ISO 7932:2004 | Bacillus cereus selective agar (PEMBA formulation) | 37ºC/18-48h | 0 | 4 |
| ISO 7932:2004 | Chromogenic agar - please state | 30ºC/18-48h | 2 | 3 |
| ISO 7932:2004 | Chromogenic agar - please state | 37ºC/18-48h | 0 | 1 |
| ISO 7932:2004 | Chromogenic agar - please state | Other | 0 | 1 |
| ISO 7932:2004 | Other | 30ºC/18-48h | 0 | 2 |
| ISO 7932:2004 | Other | 37ºC/18-48h | 0 | 1 |
| Other | Bacillus cereus selective agar (MYP) | 30ºC/18-48h | 0 | 3 |
| Other | Bacillus cereus selective agar (MYP) | Other | 0 | 2 |
| Other | Bacillus cereus selective agar (PEMBA formulation) | 30ºC/18-48h | 0 | 1 |
| Other | Chromogenic agar - please state | 30ºC/18-48h | 1 | 1 |
| Other | Chromogenic agar - please state | Other | 0 | 1 |
| Other | Other | 30ºC/18-48h | 0 | 5 |
| Other | Other | 37ºC/18-48h | 0 | 1 |
| Other; ISO 7932:2004 | Chromogenic agar - please state; Bacillus cereus selective agar (PEMBA formulation) | 37ºC/18-48h | 0 | 0 |

## Sample S0797

| Coagulase-positive staphylococci Method | Coagulase-positive staphylococci Media | Coagulase-positive staphylococci Incubation | Count reported | Count censored values |
|---|---|---|---|---|
| ISO 6888-1:2021 | Baird – Parker medium (BPM) | 37ºC/24-48h | 46 | 0 |
| ISO 6888-1:2021 | Baird – Parker medium (BPM) | Other | 1 | 0 |
| ISO 6888-1:2021 | Chromogenic agar - please state | 37ºC/18-24h | 1 | 0 |
| ISO 6888-1:2021 | Rabbit plasma fibrinogen agar (RPF) | 37ºC/24-48h | 1 | 0 |
| ISO 6888-2:2021 | Baird – Parker medium (BPM) | 37ºC/24-48h | 2 | 0 |
| ISO 6888-2:2021 | Baird – Parker medium (BPM); Rabbit plasma fibrinogen agar (RPF) | 37ºC/24-48h | 0 | 0 |
| ISO 6888-2:2021 | Chromogenic agar - please state | 37ºC/18-24h | 2 | 0 |
| ISO 6888-2:2021 | Other | 37ºC/18-24h | 1 | 0 |
| ISO 6888-2:2021 | Other | 37ºC/24-48h | 2 | 0 |
| ISO 6888-2:2021 | Rabbit plasma fibrinogen agar (RPF) | 37ºC/18-24h; 37ºC/24-48h | 0 | 1 |
| ISO 6888-2:2021 | Rabbit plasma fibrinogen agar (RPF) | 37ºC/24-48h | 16 | 0 |
| ISO 6888-3:2003 | Baird – Parker medium (BPM) | 37ºC/24-48h | 3 | 0 |
| Other | Baird – Parker medium (BPM) | 37ºC/18-24h | 1 | 0 |
| Other | Baird – Parker medium (BPM) | 37ºC/24-48h | 4 | 0 |
| Other | Baird – Parker medium (BPM) | Other | 3 | 0 |
| Other | Chromogenic agar - please state | 37ºC/18-24h | 2 | 0 |
| Other | Other | 37ºC/18-24h | 6 | 1 |
| Other | Other | Other | 1 | 0 |
| Other | Rabbit plasma fibrinogen agar (RPF) | 37ºC/24-48h | 1 | 1 |
| Other; ISO 6888-2:2021 | Baird – Parker medium (BPM) | 37ºC/24-48h | 1 | 0 |

## Sample S0797

| *Listeria* spp. (including *L.mono*) Method | *Listeria* spp. (including *L.mono*) Media | *Listeria* spp. (including *L.mono*) Incubation | Count reported | Count censored values |
|---|---|---|---|---|
| ISO 11290-2:2017 | Brilliance Listeria agar | 37ºC/24-48h | 3 | 1 |
| ISO 11290-2:2017 | Brilliance Listeria agar | 37ºC/24-48h; Other | 1 | 0 |
| ISO 11290-2:2017 | Brilliance Listeria agar; Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 0 | 0 |
| ISO 11290-2:2017 | Other | 37ºC/24-48h | 1 | 1 |
| ISO 11290-2:2017 | Other chromogenic agar | 37ºC/24-48h | 8 | 0 |
| ISO 11290-2:2017 | Other chromogenic agar; Brilliance Listeria agar | 37ºC/24-48h | 1 | 0 |
| ISO 11290-2:2017 | Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 27 | 0 |
| ISO 11290-2:2017 | Ottaviani and Agosti agar (ALOA); Oxford Listeria selective agar | 37ºC/24-48h | 9 | 1 |
| ISO 11290-2:2017 | Ottaviani and Agosti agar (ALOA); PALCAM Listeria selective agar | 37ºC/24-48h | 4 | 0 |
| ISO 11290-2:2017 | Oxford Listeria selective agar; Brilliance Listeria agar | 37ºC/24-48h | 1 | 0 |
| ISO 11290-2:2017 | Oxford Listeria selective agar; Other chromogenic agar | 37ºC/24-48h | 2 | 0 |
| ISO 11290-2:2017 | Oxford Listeria selective agar; Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 6 | 0 |
| ISO 11290-2:2017 | PALCAM Listeria selective agar; Brilliance Listeria agar | 37ºC/24-48h | 1 | 0 |
| ISO 11290-2:2017 | PALCAM Listeria selective agar; Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 3 | 0 |
| Other | Brilliance Listeria agar | 37ºC/24-48h | 1 | 2 |
| Other | Other | 37ºC/24-48h | 1 | 0 |
| Other | Other | Other | 1 | 1 |
| Other | Other chromogenic agar | 37ºC/24-48h | 2 | 0 |
| Other | Other chromogenic agar | Other | 1 | 0 |
| Other | Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 2 | 1 |
| Other | Ottaviani and Agosti agar (ALOA); Other chromogenic agar | 37ºC/24-48h | 1 | 0 |
| Other | Oxford Listeria selective agar; Brilliance Listeria agar | 37ºC/24-48h | 1 | 0 |
| Other; ISO 11290-2:2017 | Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 1 | 0 |

## Sample S0797

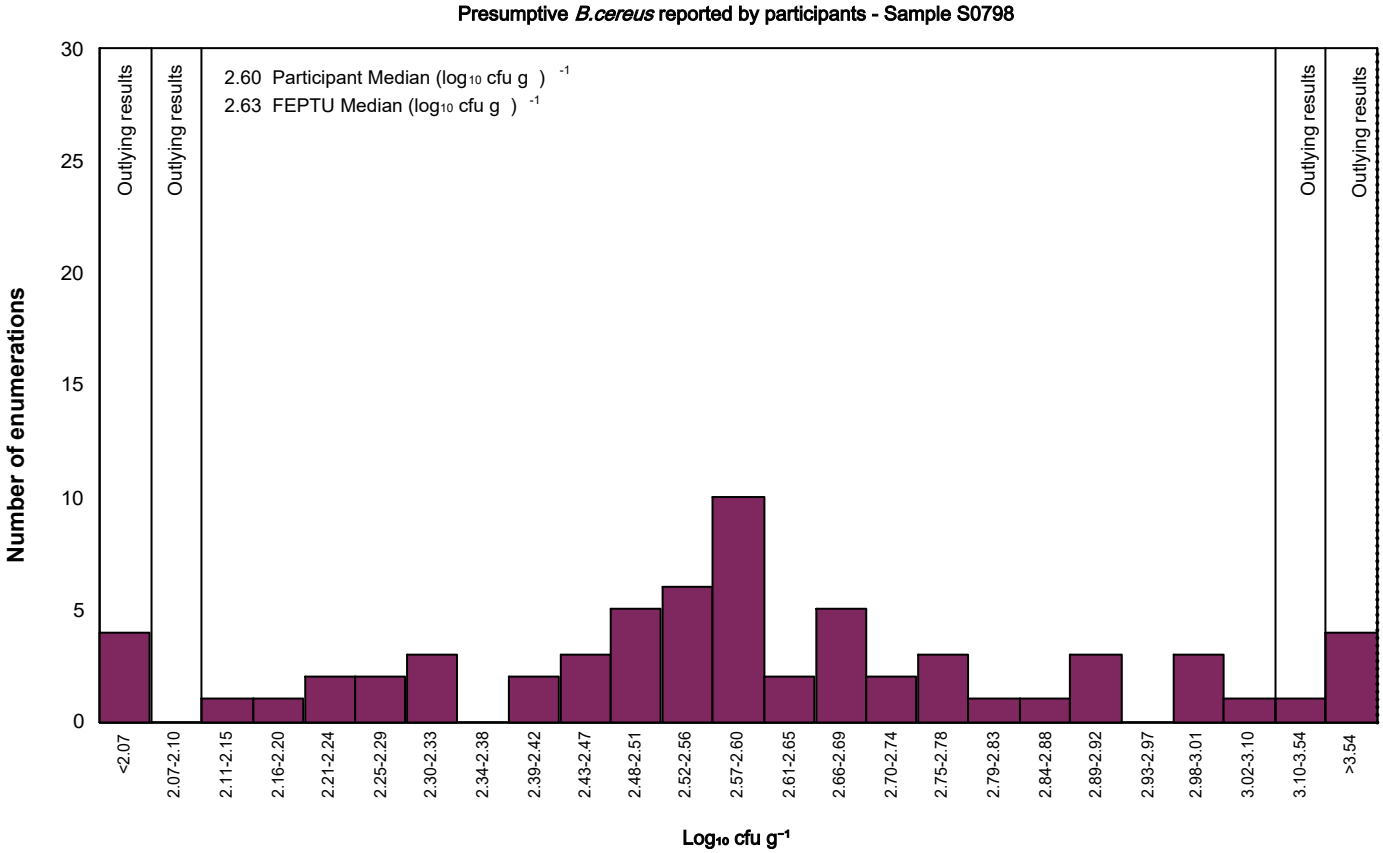
| *L.monocytogenes* Method | *L.monocytogenes* Media | *L.monocytogenes* Incubation | Count reported | Count censored values |
|---|---|---|---|---|
| ISO 11290-2:2017 | Brilliance Listeria agar | 37ºC/24-48h | 3 | 1 |
| ISO 11290-2:2017 | Brilliance Listeria agar; Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 0 | 0 |
| ISO 11290-2:2017 | Brilliance Listeria agar; PALCAM Listeria selective agar | 37ºC/24-48h | 1 | 0 |
| ISO 11290-2:2017 | Other | 37ºC/24-48h | 1 | 0 |
| ISO 11290-2:2017 | Other chromogenic agar | 37ºC/24-48h | 8 | 0 |
| ISO 11290-2:2017 | Other chromogenic agar; Brilliance Listeria agar | 37ºC/24-48h | 1 | 0 |
| ISO 11290-2:2017 | Other chromogenic agar; Oxford Listeria selective agar | 37ºC/24-48h | 1 | 0 |
| ISO 11290-2:2017 | Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 33 | 2 |
| ISO 11290-2:2017 | Ottaviani and Agosti agar (ALOA); Brilliance Listeria agar; Other | 37ºC/24-48h | 1 | 0 |
| ISO 11290-2:2017 | Ottaviani and Agosti agar (ALOA); Oxford Listeria selective agar | 37ºC/24-48h | 8 | 0 |
| ISO 11290-2:2017 | Ottaviani and Agosti agar (ALOA); PALCAM Listeria selective agar | 37ºC/24-48h | 3 | 0 |
| ISO 11290-2:2017 | Oxford Listeria selective agar; Brilliance Listeria agar | 37ºC/24-48h | 1 | 0 |
| ISO 11290-2:2017 | Oxford Listeria selective agar; Other chromogenic agar | 37ºC/24-48h | 1 | 0 |
| ISO 11290-2:2017 | Oxford Listeria selective agar; Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 7 | 0 |
| ISO 11290-2:2017 | PALCAM Listeria selective agar; Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 6 | 0 |
| Other | Brilliance Listeria agar | 37ºC/24-48h | 1 | 1 |
| Other | Brilliance Listeria agar | Other | 1 | 0 |
| Other | Other | 37ºC/24-48h | 1 | 0 |
| Other | Other | Other | 1 | 0 |
| Other | Other chromogenic agar | 37ºC/24-48h | 4 | 0 |
| Other | Other chromogenic agar | Other | 1 | 0 |
| Other | Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 3 | 1 |
| Other | Ottaviani and Agosti agar (ALOA); Other chromogenic agar | 37ºC/24-48h | 1 | 0 |
| Other | Oxford Listeria selective agar; Brilliance Listeria agar | 37ºC/24-48h | 1 | 0 |
| Other | PALCAM Listeria selective agar; Other chromogenic agar | Other | 0 | 1 |
| Other; ISO 11290-2:2017 | Other chromogenic agar | 37ºC/24-48h | 1 | 0 |
| Other; ISO 11290-2:2017 | Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 1 | 0 |

## Sample S0797

| Aerobic colony count Method | Aerobic colony count Media | Aerobic colony count Incubation | Count reported | Count censored values |
|---|---|---|---|---|
| ISO 4833-1:2013 | Petrifilm TM | 30ºC/48h | 4 | 1 |
| ISO 4833-1:2013 | Petrifilm TM | 30ºC/72h | 3 | 0 |
| ISO 4833-1:2013 | Petrifilm TM | 37ºC/24h | 1 | 0 |
| ISO 4833-1:2013 | Plate count agar | 30ºC/48h | 6 | 0 |
| ISO 4833-1:2013 | Plate count agar | 30ºC/72h | 30 | 1 |
| ISO 4833-1:2013; ISO 4833-2:2013 | Plate count agar | 30ºC/48h; Other | 1 | 0 |
| ISO 4833-1:2013; ISO 4833-2:2013 | Plate count agar | 30ºC/72h | 0 | 0 |
| ISO 4833-1:2013; ISO 4833-2:2013 | Plate count agar | 30ºC/72h; 30ºC/48h | 0 | 0 |
| ISO 4833-2:2013 | Plate count agar | 30ºC/48h | 6 | 0 |
| ISO 4833-2:2013 | Plate count agar | 30ºC/72h | 11 | 0 |
| ISO 4833-2:2013 | Plate count agar; Petrifilm TM | 30ºC/48h | 0 | 0 |
| MPN - TEMPO | Other | 30ºC/48h | 4 | 0 |
| MPN - TEMPO | Other | Other | 3 | 0 |
| Other | Petrifilm TM | 30ºC/48h | 1 | 0 |
| Other | Petrifilm TM | Other | 2 | 0 |
| Other | Plate count agar | 30ºC/48h | 1 | 0 |
| Other | Plate count agar | 30ºC/72h | 5 | 0 |
| Other | Plate count agar | Other | 4 | 0 |

## Sample S0797

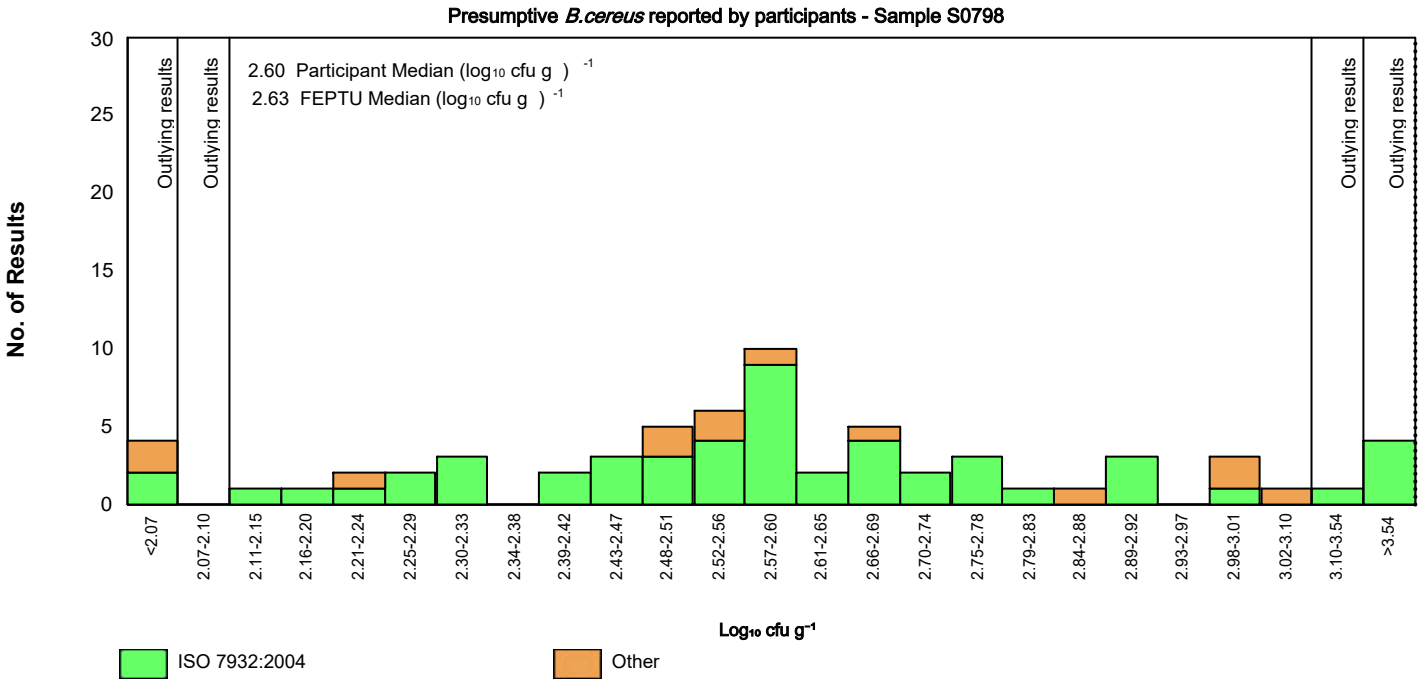
| Coliform Method | Coliform Media | Coliform Incubation | Count reported | Count censored values |
|---|---|---|---|---|
| ISO 4831:2006 | Other | Other | 1 | 0 |
| ISO 4831:2006 | Petrifilm TM | 37ºC/24h | 2 | 0 |
| ISO 4831:2006 | Petrifilm TM | 37ºC/24h; 30ºC/24h | 0 | 0 |
| ISO 4831:2006; ISO 4832:2006 | Violet red bile agar (VRBA) | 37ºC/24h | 0 | 0 |
| ISO 4832:2006 | Chromogenic agar - please state | 37ºC/24h | 2 | 0 |
| ISO 4832:2006 | Other | 30ºC/24h | 1 | 0 |
| ISO 4832:2006 | Other | 37ºC/24h | 1 | 0 |
| ISO 4832:2006 | Petrifilm TM | 30ºC/24h | 2 | 0 |
| ISO 4832:2006 | Petrifilm TM | 37ºC/24h | 1 | 0 |
| ISO 4832:2006 | Violet red bile agar (VRBA) | | 0 | 0 |
| ISO 4832:2006 | Violet red bile agar (VRBA) | 30ºC/24h | 14 | 0 |
| ISO 4832:2006 | Violet red bile agar (VRBA) | 37ºC/24h | 33 | 0 |
| ISO 4832:2006 | Violet red bile agar (VRBA) | 37ºC/24h; 30ºC/24h | 0 | 0 |
| MPN - TEMPO | Other | Other | 1 | 0 |
| Multiple tube method (MPN) | Other | 37ºC/24h | 1 | 0 |
| Multiple tube method (MPN) | Other | Other | 1 | 0 |
| Multiple tube method (MPN); MPN - TEMPO | | 30ºC/24h; 37ºC/24h | 0 | 0 |
| Other | Chromogenic agar - please state | 37ºC/24h | 2 | 0 |
| Other | Other | 37ºC/24h | 0 | 1 |
| Other | Petrifilm TM | Other | 2 | 0 |
| Other | Violet red bile agar (VRBA) | 30ºC/24h | 3 | 0 |

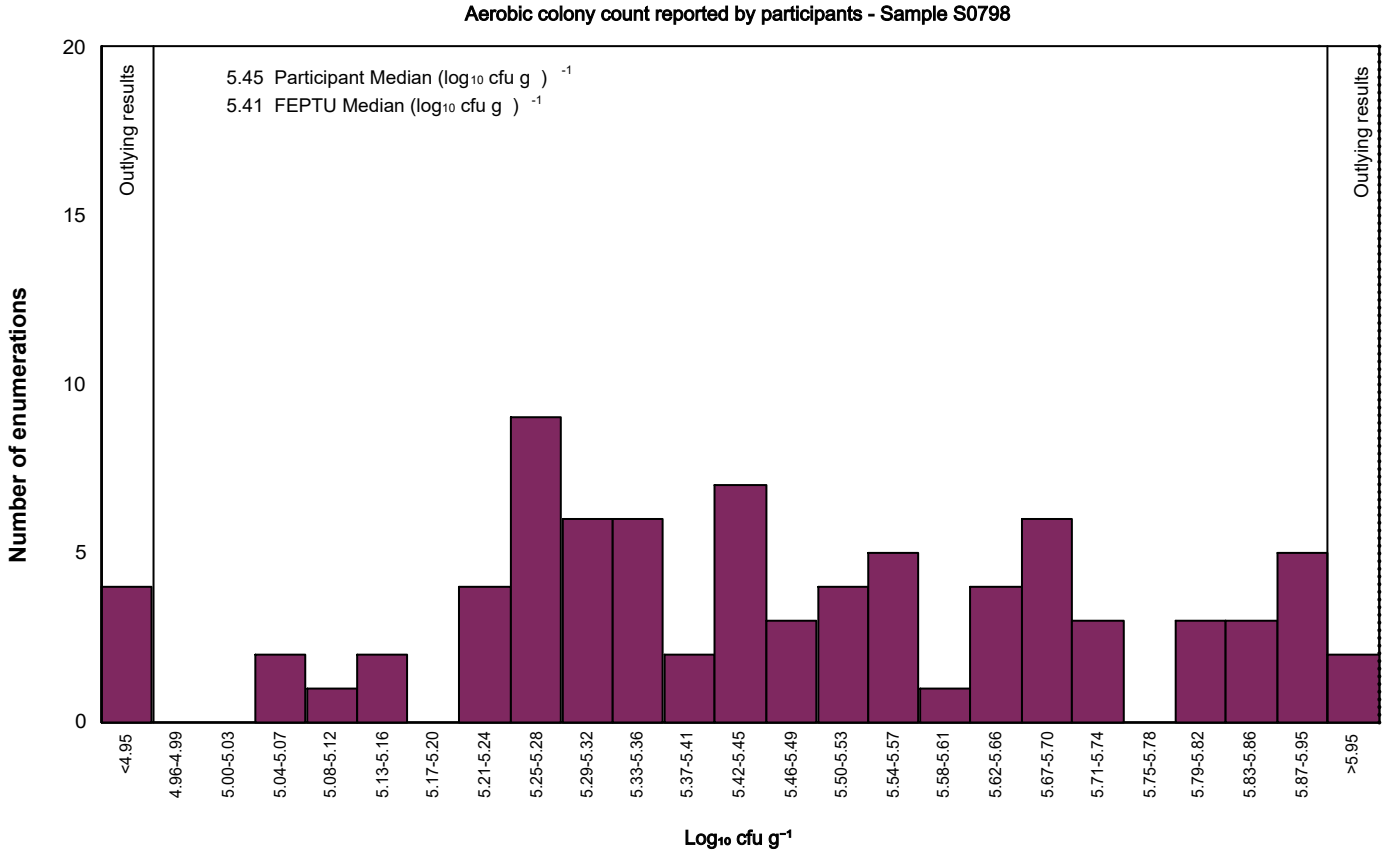



## Method based presentation

**S0798 : Presumptive *B.cereus*** **FEPTU Method: ISO 7932:2004**

| Method | Number of Results | Excluded Results | Percentage of the total | Median ($Log_{10}$ cfu $g^{-1}$) | Robust *S** ($Log_{10}$ cfu $g^{-1}$) | Range Reported ($Log_{10}$ cfu $g^{-1}$) |
|---|---|---|---|---|---|---|
| ISO 7932:2004 | 52 | 3 | 78 | 2.60 | 0.23 | 1.90 - 5.18 |
| Other | 14 | 0 | 21 | 2.54 | 0.21 | 0.00 - 3.08 |



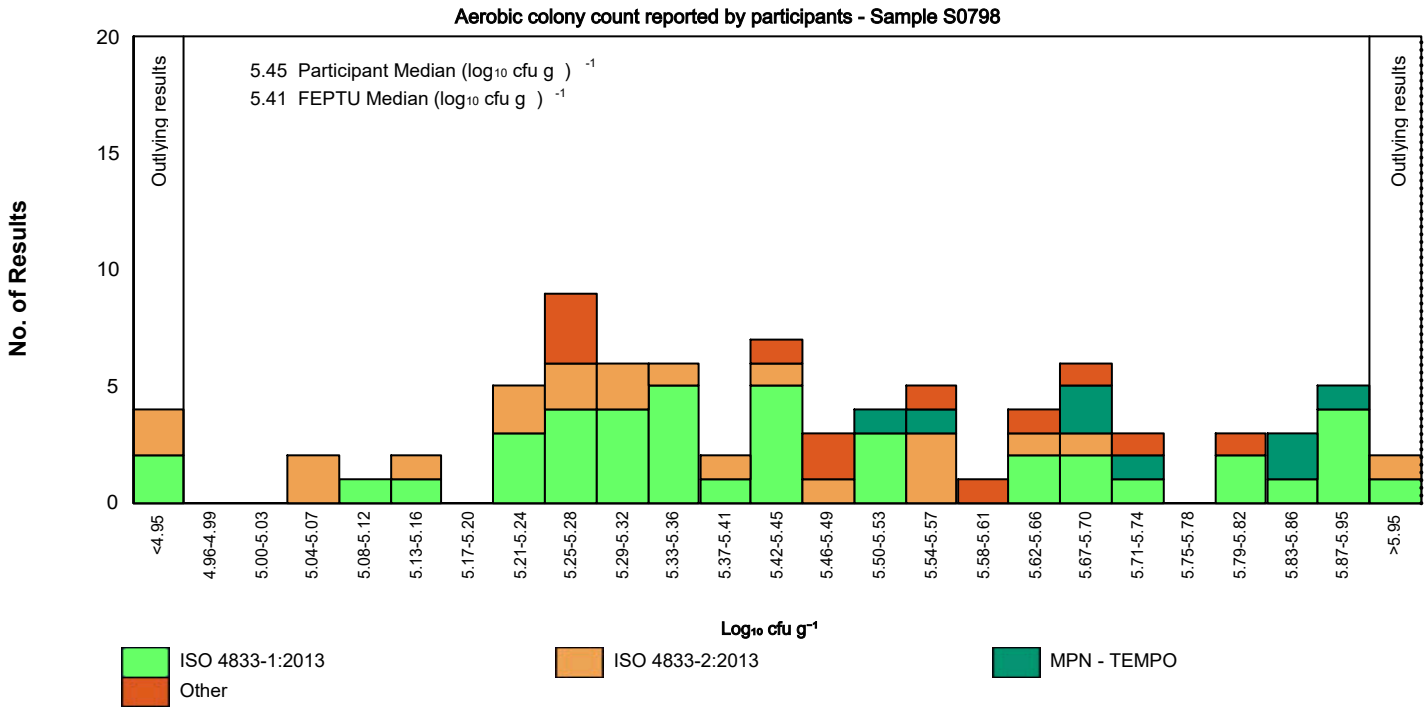



## Method based presentation

S0798 : Aerobic colony count

FEPTU Method: ISO 4833-1:2013

| Method | Number of Results | Excluded Results | Percentage of the total | Median ($Log_{10}$ cfu $g^{-1}$) | Robust *S** ($Log_{10}$ cfu $g^{-1}$) | Range Reported ($Log_{10}$ cfu $g^{-1}$) |
|---|---|---|---|---|---|---|
| ISO 4833-1:2013 | 42 | 0 | 50 | 5.41 | 0.24 | 4.91 - 5.97 |
| ISO 4833-2:2013 | 21 | 0 | 25 | 5.32 | 0.26 | 4.18 - 5.97 |
| MPN - TEMPO | 8 | 0 | 9 | | | - |
| Other | 13 | 0 | 15 | 5.48 | 0.23 | 5.18 - 5.81 |



## Sample S0798

| Presumptive *B.cereus* Method | Presumptive *B.cereus* Media | Presumptive *B.cereus* Incubation | Count reported | Count censored values |
|---|---|---|---|---|
| | | 30ºC/18-48h | 0 | 0 |
| | Bacillus cereus selective agar (MYP) | 30ºC/18-48h | 0 | 0 |
| ISO 7932:2004 | Bacillus cereus selective agar (MYP) | 30ºC/18-48h | 34 | 5 |
| ISO 7932:2004 | Bacillus cereus selective agar (MYP) | 30ºC/18-48h; 37ºC/18-48h | 0 | 0 |
| ISO 7932:2004 | Bacillus cereus selective agar (MYP) | 37ºC/18-48h | 1 | 0 |
| ISO 7932:2004 | Bacillus cereus selective agar (PEMBA formulation) | 30ºC/18-48h | 2 | 0 |
| ISO 7932:2004 | Bacillus cereus selective agar (PEMBA formulation) | 37ºC/18-48h | 4 | 0 |
| ISO 7932:2004 | Bacillus cereus selective agar (PEMBA formulation); Bacillus cereus selective agar (MYP) | 30ºC/18-48h | 0 | 0 |
| ISO 7932:2004 | Chromogenic agar - please state | 30ºC/18-48h | 6 | 0 |
| ISO 7932:2004 | Chromogenic agar - please state | 37ºC/18-48h | 1 | 0 |
| ISO 7932:2004 | Chromogenic agar - please state | Other | 1 | 0 |
| ISO 7932:2004 | Other | 30ºC/18-48h | 2 | 0 |
| ISO 7932:2004 | Other | 37ºC/18-48h | 1 | 0 |
| Other | Bacillus cereus selective agar (MYP) | 30ºC/18-48h | 2 | 0 |
| Other | Bacillus cereus selective agar (MYP) | Other | 2 | 0 |
| Other | Bacillus cereus selective agar (PEMBA formulation) | 30ºC/18-48h | 1 | 0 |
| Other | Chromogenic agar - please state | 30ºC/18-48h | 2 | 0 |
| Other | Chromogenic agar - please state | Other | 1 | 0 |
| Other | Other | 30ºC/18-48h | 5 | 0 |
| Other | Other | 37ºC/18-48h | 0 | 1 |
| Other; ISO 7932:2004 | Bacillus cereus selective agar (PEMBA formulation); Chromogenic agar - please state | 37ºC/18-48h | 0 | 0 |

## Sample S0798

| Coagulase-positive staphylococci Method | Coagulase-positive staphylococci Media | Coagulase-positive staphylococci Incubation | Count reported | Count censored values |
|---|---|---|---|---|
| ISO 6888-1:2021 | Baird – Parker medium (BPM) | 37ºC/24-48h | 6 | 28 |
| ISO 6888-1:2021 | Baird – Parker medium (BPM) | Other | 1 | 0 |
| ISO 6888-1:2021 | Chromogenic agar - please state | 37ºC/18-24h | 0 | 1 |
| ISO 6888-1:2021 | Rabbit plasma fibrinogen agar (RPF); Baird – Parker medium (BPM) | 37ºC/24-48h | 0 | 0 |
| ISO 6888-1:2021; ISO 6888-2:2021 | Rabbit plasma fibrinogen agar (RPF); Baird – Parker medium (BPM) | 37ºC/18-24h; 37ºC/24-48h | 0 | 0 |
| ISO 6888-1:2021; ISO 6888-2:2021 | Rabbit plasma fibrinogen agar (RPF); Baird – Parker medium (BPM) | 37ºC/24-48h | 0 | 0 |
| ISO 6888-2:2021 | Baird – Parker medium (BPM) | 37ºC/24-48h | 0 | 1 |
| ISO 6888-2:2021 | Chromogenic agar - please state | 37ºC/18-24h | 0 | 2 |
| ISO 6888-2:2021 | Other | 37ºC/18-24h | 0 | 1 |
| ISO 6888-2:2021 | Other | 37ºC/24-48h | 0 | 2 |
| ISO 6888-2:2021 | Rabbit plasma fibrinogen agar (RPF) | 37ºC/18-24h; 37ºC/24-48h | 0 | 1 |
| ISO 6888-2:2021 | Rabbit plasma fibrinogen agar (RPF) | 37ºC/24-48h | 0 | 14 |
| ISO 6888-2:2021 | Rabbit plasma fibrinogen agar (RPF); Baird – Parker medium (BPM) | 37ºC/24-48h | 0 | 0 |
| ISO 6888-3:2003 | Baird – Parker medium (BPM) | 37ºC/24-48h | 1 | 2 |
| ISO 6888-3:2003; ISO 6888-2:2021 | Rabbit plasma fibrinogen agar (RPF) | 37ºC/24-48h | 0 | 0 |
| Other | Baird – Parker medium (BPM) | 37ºC/18-24h | 0 | 0 |
| Other | Baird – Parker medium (BPM) | 37ºC/24-48h | 0 | 4 |
| Other | Baird – Parker medium (BPM) | Other | 1 | 2 |
| Other | Chromogenic agar - please state | 37ºC/18-24h | 0 | 2 |
| Other | Other | 37ºC/18-24h | 0 | 9 |
| Other | Other | Other | 0 | 1 |
| Other | Rabbit plasma fibrinogen agar (RPF) | 37ºC/24-48h | 1 | 1 |
| Other; ISO 6888-2:2021 | Baird – Parker medium (BPM) | 37ºC/24-48h | 0 | 0 |

## Sample S0798

| *Listeria* spp. (including *L.mono*) Method | *Listeria* spp. (including *L.mono*) Media | *Listeria* spp. (including *L.mono*) Incubation | Count reported | Count censored values |
|---|---|---|---|---|
| ISO 11290-2:2017 | Brilliance Listeria agar | 37ºC/24-48h | 2 | 2 |
| ISO 11290-2:2017 | Brilliance Listeria agar | Other; 37ºC/24-48h | 0 | 1 |
| ISO 11290-2:2017 | Brilliance Listeria agar; Other chromogenic agar | 37ºC/24-48h | 0 | 1 |
| ISO 11290-2:2017 | Brilliance Listeria agar; PALCAM Listeria selective agar | 37ºC/24-48h | 0 | 1 |
| ISO 11290-2:2017 | Other | 37ºC/24-48h | 0 | 2 |
| ISO 11290-2:2017 | Other chromogenic agar | 37ºC/24-48h | 1 | 7 |
| ISO 11290-2:2017 | Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 2 | 20 |
| ISO 11290-2:2017 | Ottaviani and Agosti agar (ALOA); Brilliance Listeria agar | 37ºC/24-48h | 0 | 0 |
| ISO 11290-2:2017 | Ottaviani and Agosti agar (ALOA); Oxford Listeria selective agar | 37ºC/24-48h | 1 | 4 |
| ISO 11290-2:2017 | Ottaviani and Agosti agar (ALOA); PALCAM Listeria selective agar | 37ºC/24-48h | 0 | 3 |
| ISO 11290-2:2017 | Oxford Listeria selective agar; Brilliance Listeria agar | 37ºC/24-48h | 0 | 1 |
| ISO 11290-2:2017 | Oxford Listeria selective agar; Other chromogenic agar | 37ºC/24-48h | 0 | 2 |
| ISO 11290-2:2017 | Oxford Listeria selective agar; Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 0 | 0 |
| ISO 11290-2:2017 | PALCAM Listeria selective agar; Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 0 | 4 |
| Other | Brilliance Listeria agar | 37ºC/24-48h | 0 | 3 |
| Other | Other | 37ºC/24-48h | 0 | 1 |
| Other | Other | Other | 0 | 2 |
| Other | Other chromogenic agar | 37ºC/24-48h | 0 | 3 |
| Other | Other chromogenic agar | Other | 0 | 1 |
| Other | Other chromogenic agar; Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 0 | 1 |
| Other | Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 0 | 2 |
| Other | Oxford Listeria selective agar; Brilliance Listeria agar | 37ºC/24-48h | 0 | 1 |
| Other; ISO 11290-2:2017 | Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 0 | 1 |

## Sample S0798

| *L.monocytogenes* Method | *L.monocytogenes* Media | *L.monocytogenes* Incubation | Count reported | Count censored values |
|---|---|---|---|---|
| ISO 11290-2:2017 | Brilliance Listeria agar | 37ºC/24-48h | 0 | 4 |
| ISO 11290-2:2017 | Brilliance Listeria agar; Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 0 | 0 |
| ISO 11290-2:2017 | Brilliance Listeria agar; PALCAM Listeria selective agar | 37ºC/24-48h | 0 | 1 |
| ISO 11290-2:2017 | Other | 37ºC/24-48h | 0 | 2 |
| ISO 11290-2:2017 | Other chromogenic agar | 37ºC/24-48h | 0 | 8 |
| ISO 11290-2:2017 | Other chromogenic agar; Brilliance Listeria agar | 37ºC/24-48h | 0 | 1 |
| ISO 11290-2:2017 | Other chromogenic agar; Oxford Listeria selective agar | 37ºC/24-48h | 0 | 2 |
| ISO 11290-2:2017 | Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 2 | 28 |
| ISO 11290-2:2017 | Ottaviani and Agosti agar (ALOA); Oxford Listeria selective agar | 37ºC/24-48h | 0 | 1 |
| ISO 11290-2:2017 | Ottaviani and Agosti agar (ALOA); PALCAM Listeria selective agar | 37ºC/24-48h | 0 | 2 |
| ISO 11290-2:2017 | Oxford Listeria selective agar; Brilliance Listeria agar | 37ºC/24-48h | 0 | 1 |
| ISO 11290-2:2017 | Oxford Listeria selective agar; Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 1 | 4 |
| ISO 11290-2:2017 | PALCAM Listeria selective agar; Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 0 | 6 |
| Other | Brilliance Listeria agar | 37ºC/24-48h | 0 | 3 |
| Other | Brilliance Listeria agar; Oxford Listeria selective agar | 37ºC/24-48h | 0 | 1 |
| Other | Other | 37ºC/24-48h | 0 | 1 |
| Other | Other | Other | 0 | 1 |
| Other | Other chromogenic agar | 37ºC/24-48h | 0 | 6 |
| Other | Other chromogenic agar | Other | 0 | 1 |
| Other | Other chromogenic agar; Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 0 | 1 |
| Other | Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 0 | 3 |
| Other | PALCAM Listeria selective agar; Oxford Listeria selective agar | Other | 0 | 1 |
| Other; ISO 11290-2:2017 | Ottaviani and Agosti agar (ALOA) | 37ºC/24-48h | 0 | 1 |

## Sample S0798

| Aerobic colony count Method | Aerobic colony count Media | Aerobic colony count Incubation | Count reported | Count censored values |
|---|---|---|---|---|
| ISO 4833-1:2013 | Petrifilm TM | 30ºC/48h | 4 | 1 |
| ISO 4833-1:2013 | Petrifilm TM | 30ºC/72h | 2 | 0 |
| ISO 4833-1:2013 | Petrifilm TM | 37ºC/24h | 1 | 0 |
| ISO 4833-1:2013 | Plate count agar | 30ºC/48h | 6 | 0 |
| ISO 4833-1:2013 | Plate count agar | 30ºC/72h | 28 | 1 |
| ISO 4833-1:2013; ISO 4833-2:2013 | Plate count agar | 30ºC/48h; 30ºC/72h | 0 | 0 |
| ISO 4833-1:2013; ISO 4833-2:2013 | Plate count agar | 30ºC/72h | 0 | 0 |
| ISO 4833-1:2013; ISO 4833-2:2013 | Plate count agar | Other; 30ºC/48h | 1 | 0 |
| ISO 4833-2:2013 | Plate count agar | 30ºC/48h | 6 | 0 |
| ISO 4833-2:2013 | Plate count agar | 30ºC/72h | 14 | 0 |
| ISO 4833-2:2013 | Plate count agar; Petrifilm TM | 30ºC/48h | 0 | 0 |
| MPN - TEMPO | Other | 30ºC/48h | 5 | 0 |
| MPN - TEMPO | Other | Other | 3 | 0 |
| Other | Petrifilm TM | 30ºC/48h | 1 | 0 |
| Other | Petrifilm TM | Other | 2 | 0 |
| Other | Plate count agar | 30ºC/48h | 1 | 0 |
| Other | Plate count agar | 30ºC/72h | 4 | 0 |
| Other | Plate count agar | Other | 4 | 0 |

**Sample S0798**

| Coliform Method | Coliform Media | Coliform Incubation | Count reported | Count censored values |
|---|---|---|---|---|
| ISO 4831:2006 | Other | Other | 1 | 0 |
| ISO 4831:2006 | Petrifilm TM | 30ºC/24h; 37ºC/24h | 0 | 0 |
| ISO 4831:2006 | Petrifilm TM | 37ºC/24h | 2 | 0 |
| ISO 4831:2006 | Violet red bile agar (VRBA) | 37ºC/24h | 1 | 0 |
| ISO 4831:2006; ISO 4832:2006 | Violet red bile agar (VRBA) | 37ºC/24h | 0 | 0 |
| ISO 4832:2006 | Chromogenic agar - please state | 37ºC/24h | 0 | 2 |
| ISO 4832:2006 | Other | 30ºC/24h | 0 | 1 |
| ISO 4832:2006 | Other | 37ºC/24h | 1 | 0 |
| ISO 4832:2006 | Petrifilm TM | 30ºC/24h | 1 | 0 |
| ISO 4832:2006 | Petrifilm TM | 37ºC/24h | 1 | 0 |
| ISO 4832:2006 | Violet red bile agar (VRBA) | 30ºC/24h | 0 | 11 |
| ISO 4832:2006 | Violet red bile agar (VRBA) | 37ºC/24h | 13 | 9 |
| ISO 4832:2006 | Violet red bile agar (VRBA) | 37ºC/24h; 30ºC/24h | 0 | 0 |
| MPN - TEMPO | Other | 30ºC/24h | 0 | 2 |
| Multiple tube method (MPN) | Other | 37ºC/24h | 0 | 1 |
| Multiple tube method (MPN) | Other | Other | 0 | 1 |
| Multiple tube method (MPN); MPN - TEMPO | | 30ºC/24h; 37ºC/24h | 0 | 0 |
| Other | Chromogenic agar - please state | 37ºC/24h | 0 | 2 |
| Other | Other | 37ºC/24h | 0 | 1 |
| Other | Petrifilm TM | Other | 1 | 1 |
| Other | Violet red bile agar (VRBA) | 30ºC/24h | 1 | 1 |
| Other; ISO 4832:2006 | Petrifilm TM | 30ºC/24h | 1 | 0 |

## Performance Assessment Sheet

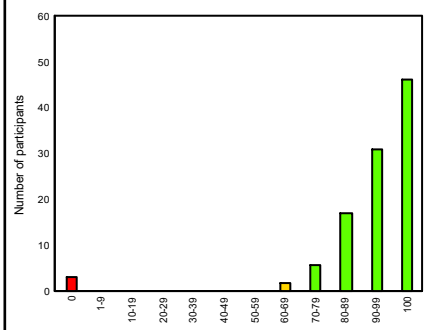
Participants are reminded that to take advantage of the performance assessment overtime tool provided in the reports they need to take part in more than one distribution a year.

Performance assessments are designed to identify laboratories with on-going problems with their examinations and are undertaken after every distribution. Scores are allocated to results reported for every sample to help assess participants' performance.

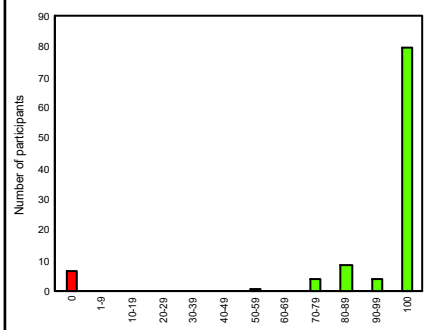
Cumulative scores are calculated for every participant, for all examination types, for the current and previous five distributions. Participants' cumulative scores for each of the examination types are compared with the maximum possible scores after every distribution.

| Distribution | Sample | Examination | Your score | Your % | Sample | Examination | Your score | Your % |
|---|---|---|---|---|---|---|---|---|
| 380 | S0797 | Pathogen | | | S0798 | Pathogen | | |
| | S0797 | ACC | | | S0798 | ACC | | |
| | S0797 | Indicator | | | S0798 | Indicator | | |
| 378 | S0793 | Pathogen | | | S0794 | Pathogen | | |
| | S0793 | ACC | | | S0794 | ACC | | |
| | S0793 | Indicator | | | S0794 | Indicator | | |
| 376 | S0789 | Pathogen | | | S0790 | Pathogen | | |
| | S0789 | ACC | | | S0790 | ACC | | |
| | S0789 | Indicator | | | S0790 | Indicator | | |
| 374 | S0785 | Pathogen | | | S0786 | Pathogen | | |
| | S0785 | ACC | | | S0786 | ACC | | |
| | S0785 | Indicator | | | S0786 | Indicator | | |
| 372 | S0781 | Pathogen | | | S0782 | Pathogen | | |
| | S0781 | ACC | | | S0782 | ACC | | |
| | S0781 | Indicator | | | S0782 | Indicator | | |
| 370 | S0777 | Pathogen | | | S0778 | Pathogen | | |
| | S0777 | ACC | | | S0778 | ACC | | |
| | S0777 | Indicator | | | S0778 | Indicator | | |

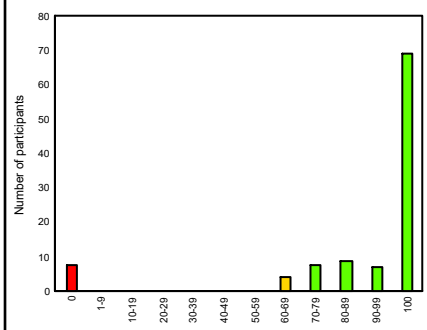
Pathogen Performance Assessment for Distributions 380,378,376,374,372,370




ACC Performance Assessment for Distributions 380,378,376,374,372,370




Indicator Performance Assessment for Distributions 380,378,376,374,372,370




**Performance Assessment Comment:**

Laboratories that achieve less than 70% of the maximum possible score are likely to be experiencing significant problems with their examinations and are advised to

a) refer to the relevant sample reports for specific comments

b) refer to the website guidance documents:

Scheme Guide - FEPTU and Scoring - FEPTU

c) contact the organisers for advice.

Sample specific comment

**S0798 - Coliform**

23/56 (41%) of the participants reported a false positive result for this examination. This sample contained a *Providencia rettgeri* at an approximate level of $1.9x10^4$ colony forming units per mL. In the FEPTU laboratory <0.55mm small pink colonies were observed on violet red bile lactose Agar (VRBL) following incubation at 37°C for 24 hours. These colonies with a confirmation test in brilliant green lactose bile broth produced no gas in the Durham tube, thereby confirming that the colonies were not a 'coliform', see image below:

These small pink colonies were confirmed as *P. rettgeri* and belong to the enterobacterales group of organisms but not classified as a coliform.

Laboratories are reminded that ISO 4832:2006 Microbiology of food and animal feeding stuffs - Horizontal method for the enumeration of coliforms - Colony-count technique states 'purplish red colonies with a diameter of at least 0.5mm (sometimes surrounded by a reddish zone of precipitated bile) are considered as typical coliforms and do not require confirmation. However the colonies observed in the FEPTU laboratory on VRBL were <0.5mm and therefore required further confirmation to be carried out.

A breakdown of the false postive results reported and the method/media information is shown in the table below:

| Number reporting a false postive result | Published method used | Media used |
|---|---|---|
| 1 | ISO 4831:2006 | Lauryl tryptose broth:BGLB |
| 1 | Maldi Tof Bruker | Bromthymolblau |
| 2 | ISO 4831:2006 | Petrifilm™ |
| 2 | ISO 4832:2006 | Petrifilm™ |
| 1 | In-house | Petrifilm™ |
| 1 | ISO 4831:2006 | Violet red bile agar (VRBA/VRBL) |
| 13 | ISO 4832:2006 | Violet red bile agar (VRBA/VRBL) |
| 2 | AM11 | Violet red bile agar (VRBA/VRBL) |

Participants are reminded that if tests are accredited then published methods should be followed.

This examination has not been scored due to the low percentage of laboratories obtaining the correct result.

General distribution comment:

Participants are reminded if you do not examine a specific parameter, you must return your results as 'Not examined' as this impacts the overall scores awarded.

General comments on methods:

Participants that did not provide information on the method and testing conditions, their data is not included in the method graphs and tables. This information is useful; therefore, participants are encouraged to complete these details.

Method based presentation tables for enumeration results:

Participants are advised if less than 10 laboratories report an enumeration result for a method, no data is shown for the Median, Robust SD and the Range Reported. Numbers shown in the 'Excluded Results' column are laboratories that reported a censored value.

Method, media and enrichment/incubation tables:

Participants are asked to note:

- that the count shown in the 'Count reported' or 'Count censored values' column includes data from those laboratories that reported:
    - a censored value
    - a result reported as detected or not detected
    - method data with no results reported.

Participants are reminded that the method data presented in this way has some limitations and seeks to identify trends in the results rather than assess specific method details.

Trend analysis:

Plotting your PT results over a period of time can help to identify potential problems. If you need the latest file, please email us on foodeqa@ukhsa.gov.uk.

General comment:

If you do not return a result for a distribution, you will not be able to view all the participants' results data in your individualised report. Please contact us if you require this information on foodeqa@ukhsa.gov.uk.

**New website**

We are pleased to announce the launch of our new website: https://www.feptu.org.uk/. Please refer to this website to obtain the latest information for your proficiency testing.

**Information of importance**

To understand more about the proficiency testing schemes, please use the following links for information on:

1. Report format explained: Annotated report

2. Performance rating: Performance-over-time and Scheme guide (section 16.0)

3. Scoring and statistics used: Scoring information and stats

4. Homogeneity and stability: Scheme guide (section 9.0)

5. Complaints and appeal process: Scheme guide (section 20.0 and 21.0)

For further information about the operation of the service including confidentiality and terms of participation, please refer to the Scheme Guide: Scheme guide

End of report.