
PROTOCOL

INTERLABORATORY COMPARISON STUDY ON THE DETECTION OF *SALMONELLA* spp. IN FEED

organised by EURL-*Salmonella*

FEED STUDY IV - 2018

Introduction

This protocol describes the procedures for the fourth interlaboratory comparison study on the detection of *Salmonella* spp. in feed samples amongst the National Reference Laboratories (NRLs) for *Salmonella* in the EU. The type of samples in this study concern chicken feed, spiked with a *Salmonella* serovar.

The prescribed method is preferably EN ISO 6579-1:2017 (Microbiology of the food chain - Horizontal method for the detection, enumeration and serotyping of *Salmonella* - Part 1: Detection of *Salmonella* spp.) and the underlying EN ISO documents, e.g. the EN ISO 6887 series for preparation of test samples.

Additionally, laboratories (who are interested) can also perform their 'own' alternative (e.g. PCR) method on the samples, if this is (routinely) used in their laboratories.

Objective

The main objective of the interlaboratory comparison study is to evaluate the performance of the NRLs for *Salmonella* for their ability to detect *Salmonella* spp. at different contamination levels in chicken feed samples.

Outline of the study

Each participant will receive one box containing 1 large plastic safety bag, packed with cooling elements. The plastic safety bag contains 20 numbered plastic bags, consisting of:

- 18 samples of chicken feed (25 g/sample) artificially contaminated with different levels of a *Salmonella* serovar (coded B1-B18);
- 2 samples, to be used for the control samples, being only BPW (coded C1), and the (own) positive control of the participating laboratory (coded C2).

Upon arrival: all samples have to be stored at 5°C (± 3 °C) until the day of analyses (26 February 2018).

The plastic safety bag will also contain the small electronic temperature recorder in a plastic bag with your lab code. Make a note of the lab code and **return the temperature recorder (in the plastic bag) to the EURL-*Salmonella* at the day your laboratory starts the study (26 February 2018)**. For this purpose the return envelope, with preprinted address label of the EURL-*Salmonella*, can be used.

Each box will be sent as biological substance category B (UN3373) by door-to-door (for non-EU-MS sometimes door-to-airport) courier service. Please contact EURL-*Salmonella* when the parcel has not arrived at your laboratory at 22nd February 2018 (this is 3 working days after the day of mailing).

The **performance** of the study will be in week 9 (starting on Monday 26 February 2018).

Remind: before homogenization, the chicken feed samples needs to stand for 20 to 30 minutes at 18 °C to 27 °C (room temperature) after addition of BPW (see ISO 6887 part 4).

The media to be used for this study will not be supplied by the EURL

Documents

The documents necessary for performing the study are:

- Protocol Interlaboratory comparison study on the detection of *Salmonella* spp. in feed IV (2018) (this document);
- Instructions for the web based test report Interlaboratory comparison study on the detection of *Salmonella* spp.: Guidance on submission of results EURL detection studies and the web based test report;
- EN ISO 6579-1:2017. Microbiology of the food chain - Horizontal method for the detection, enumeration and serotyping of *Salmonella* - Part 1: Detection of *Salmonella* spp.
- ISO 6887-1 & 4:2017 Microbiology of food and animal feeding stuffs – Preparation of test samples, initial suspension and decimal dilutions for microbiological examination. Part 1: General rules for the preparation of the initial suspension and decimal dilutions. Part 4: Specific rules for the preparation of miscellaneous products International Organisation for Standardisation, Geneva, Switzerland.

Reporting

All data have to be reported through an electronic result form. The information requested in the test report is limited. However, as all NRLs have to be accredited according to ISO 17025, we assume that additional information not requested in the test report will be available in their system. In case of deviating results, the EURL-*Salmonella* may ask the NRLs to send additional information or to perform additional tests. Therefore, we ask to conserve one *Salmonella* confirmed colony from each positive sample (B1-B18 and C1-C2).

The link, which will also become available on the EURL-*Salmonella* website, and password for this electronic result form will be send by email to the participants. Submission of data has to be finalised on **21 March 2018** (23:59 h CET) at the latest. **Mind that the electronic result form is no longer accessible after this deadline!** In case you foresee problems with the deadline, please contact us beforehand.

The EURL will prepare a summary report soon after the study to inform all NRLs on the overall results.

Timetable of interlaboratory comparison study feed IV (2018)
Detection of *Salmonella* spp. in chicken feed

Week	Date	Topic
7	12 – 16 February	Mailing of the protocol and instructions for the web based test report to the NRLs- <i>Salmonella</i> by email. Sending the link and the password for electronic reporting form to participants by email.
8	19 February	Mailing of the parcels to the NRLs as biological substance category B (UN3373) by door-to-door courier service. Immediately after arrival of the parcel at the laboratory: <ul style="list-style-type: none"> - Check for any serious damages and for completeness; (in case of deviations contact the EURL-<i>Salmonella</i>); - Store the samples at 5 °C ± 3 °C !! If you did not receive the parcel at 22 February, do contact the EURL immediately. Preparation of media following EN ISO 6579-1:2017: <ol style="list-style-type: none"> 1. Non selective pre-enrichment medium 2. Selective enrichment media 3. Solid selective plating media 4. Confirmation media
9	26 February	Performance of the study, following EN ISO 6579-1:2017 and the instructions as given in the protocol of feed study IV (2018). Remove the electronic temperature recorder from the safety bag (leave it in the plastic bag with lab code) and return it to EURL- <i>Salmonella</i> using the return envelope. Note the lab code before sending the recorder.
12	Deadline 21 March 23:59	Completion and submission of the web based test report. http://www.eurlsalmonella.eu/
	April 2018	Data elaboration at EURL- <i>Salmonella</i>
	May 2018	Sending of the individual laboratory results to the NRLs together with an interim summary report. As a follow-up, actions will be undertaken in case of poor performance.

If you have questions or remarks about this study, or in case of problems using the electronic reporting form, please contact:

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