



## Final report PT –Td 4/2020

# PT report on "Digestion method to detect *Trichinella* larvae in meat samples according to the Regulation EU 2015/1375"

Design

| Purpose                  | Evaluation of laboratories in charge for official inspection to detect <i>Trichinella</i> spp. larvae in meat |                                      |  |
|--------------------------|---------------------------------------------------------------------------------------------------------------|--------------------------------------|--|
| Scheme type              | Single, simultaneous                                                                                          |                                      |  |
| Participants             | Public and private, national and international laboratories                                                   |                                      |  |
| N. of participants       | Depending on requests                                                                                         |                                      |  |
| Method                   | Regulation EU 2015/1375 (annexes 1 and 3)                                                                     |                                      |  |
| Test method              | Regulation EU 2015/1375 (annexes 1 and 3)                                                                     |                                      |  |
| PT items                 | Matrix                                                                                                        | Pork/horse meat                      |  |
|                          | Item                                                                                                          | Trichinella live larvae              |  |
|                          | N. of samples                                                                                                 | 3 for each participant               |  |
|                          | Distribution                                                                                                  | Immediate shipment after preparation |  |
| Subcontracted activities | NA                                                                                                            |                                      |  |
| Results evaluation       | Qualitative                                                                                                   |                                      |  |

## Implementation

| N. of participants                             | 26*              |          | Pork                 | 48                                       |
|------------------------------------------------|------------------|----------|----------------------|------------------------------------------|
| Public laboratories                            | 23               |          | Horse meat           | 30                                       |
| Private<br>laboratories                        | 3                | PT items | PT panel composition | 1 positive with 5 larvae and 2 negatives |
| *some laboratories requested multiple PT panel |                  |          | Shipping             | DHL                                      |
| Shipping date                                  | November 9, 2020 |          |                      |                                          |

PTP

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## Analysis of the results

According to Regulation EU 2015/1375 of August 10, 2015, laying down specific rules on official controls for *Trichinella* in meat, the results of artificial digestion methods have to be expressed only qualitatively (i.e. as positive if *Trichinella* spp. larvae are found in the sample, or negative if no larvae are present in the sample). Then the PT is considered passed if all positive and negative samples were correctly identified by the participant.

| Laboratory code | Sample type | N° of "false<br>positives" | N° of "false<br>negatives" | Final evaluation |
|-----------------|-------------|----------------------------|----------------------------|------------------|
| LET19           | Pork 100g   | 0                          | 0                          | positive         |
| LPT12           | Pork 100g   | 0                          | 0                          | positive         |
| LPT21           | Pork 100g   | 0                          | 0                          | positive         |
| LZT11           | Horse 100g  | 0                          | 0                          | positive         |
| LZT12           | Horse 100g  | 0                          | 0                          | positive         |
| LZT13           | Horse 35g   | 0                          | 0                          | positive         |
| LZT13           | Horse 35g   | 0                          | 0                          | positive         |
| LZT14           | Horse 100g  | 0                          | 0                          | positive         |
| LZT25           | Horse 100g  | 0                          | 0                          | positive         |
| LZT28           | Pork 100g   | 0                          | 0                          | positive         |
| LZT39           | Pork 100g   | 0                          | 0                          | positive         |
| LZT40           | Pork 100g   | 0                          | 0                          | positive         |
| LZT41           | Pork 100g   | 0                          | 0                          | positive         |
| LZT42           | Horse 100g  | 0                          | 0                          | positive         |
| LZT43           | Pork 100g   | 0                          | 0                          | positive         |
| LZT44           | Pork 100g   | 0                          | 0                          | positive         |
| LZT46           | Horse 100g  | 0                          | 0                          | positive         |
| LZT47           | Pork 100g   | 0                          | 0                          | positive         |
| LZT48           | Pork 100g   | 0                          | 0                          | positive         |
| LZT49           | Pork 100g   | 0                          | 0                          | positive         |
| LZT50           | Pork 100g   | 0                          | 0                          | positive         |
| LZT50           | Horse 100g  | 0                          | 0                          | positive         |
| LZT51           | Pork 100g   | 0                          | 0                          | positive         |
| LZT52           | Pork 100g   | 0                          | 0                          | positive         |
| LZT52           | Horse 100g  | 0                          | 0                          | positive         |
| LZT53           | Pork 100g   | 0                          | 0                          | positive         |

• Laboratories that failed the PT are marked in red.

• Laboratories that attended more than one PT in the same year are identified by a number added after their laboratory code (i.e. TLIX-1, TLIX-2 etc.).

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#### Summary of results:

| Number of participant laboratories        | 26 |
|-------------------------------------------|----|
| Number of participants that passed the PT | 26 |
| Number of participants that failed the PT | 0  |

| Laboratory<br>code | 2016     | 2017     | 2018     | 2019     | 2020     |
|--------------------|----------|----------|----------|----------|----------|
| LET19              | -        | positive | positive | positive | positive |
| LPT12              | positive | positive | positive | positive | positive |
| LPT21              | positive | positive | positive | positive | positive |
| LZT11              | positive | positive | positive | positive | positive |
| LZT12              | positive | positive | positive | positive | positive |
| LZT13-35g          | positive | positive | positive | positive | positive |
| LZT13-100g         | positive | positive | positive | positive | positive |
| LZT14              | positive | positive | positive | positive | positive |
| LZT25              | positive | positive | positive | positive | positive |
| LZT28              | positive | positive | positive | positive | positive |
| LZT39              | positive | positive | positive | positive | positive |
| LZT40              | positive | positive | positive | positive | positive |
| LZT41              | positive | positive | positive | positive | positive |
| LZT42              | positive | positive | positive | positive | positive |
| LZT43              | positive | positive | positive | positive | positive |
| LZT44              | positive | positive | positive | positive | positive |
| LZT46              | positive | positive | positive | positive | positive |
| LZT47              | positive | positive | positive | -        | positive |
| LZT48              | positive | positive | positive | positive | positive |
| LZT49              | positive | positive | positive | positive | positive |
| LZT50              | positive | positive | positive | positive | positive |
| LZT50-e            | -        | positive | -        | positive | positive |
| LZT51              | positive | positive | positive | positive | positive |
| LZT52              | positive | positive | positive | positive | positive |
| LZT52-e            | -        | positive | positive | positive | positive |
| LZT53              | positive | positive | positive | positive | positive |

### Overtime comparison of results (last five years)

Legend: laboratories that requested multiple set of samples are identified according to the following rules: 1) PT set of the same type are identified by a progressive number after the laboratory code (i.e. TLIX-1, TLIX-2 etc.); 2) PT set made of horse meat are identified by the letter "h" after the laboratory code (i.e.TLX-e); 3) PT set of different weigh are identified by the indication of the weight after the laboratory code (i.e.TLX-35).

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#### Comments:

The Director Dr. S.M. Cacciò

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**Date** 17/11/2020

Notes:

- 1. To guarantee confidentiality, participant laboratories are identified by alphanumeric codes. PT participant identity is kept confidential and bound by professional secrecy. If PT results have to be provided directly to a competent authority, the organizer shall send a written notice to inform the involved participants.
- 2. The organizer designates a qualified company for the transport and delivery of PT items.
- 3. Each participating laboratory receives a PT panel according to the PT scheme. Each PT item consists of minced pork or horse meat spiked or not with live Trichinella spiralis muscle larvae. The homogeneity of PT items is ensured by an accurate control of the number of larvae spiked into each sample (item), made by two operators using a stereo microscope. PT items are stable for 5 days from the date of preparation (corresponding to the shipping date), provided that they are maintained in suitable conditions.
- 4. At the beginning of each year, the organizer draws up a PT program and makes it known by publishing it on the EURLP website (for national, international, public and private laboratories) or by email (NRLs).
- 5. The final report issue of each PT round shows the PT program implementation.

End of the report

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