

Department of Infectious Diseases Unit of Foodborne and Neglected Parasitic Diseases European Union Reference Laboratory for Parasites



# Final report PT -Td 1/2019

# 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 Trichinella 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 (annex 1)		
Test method	Regulation EU 2015/1375 (annex 1)		
	Matrix	Pork/horse meat	
PT items	Item	Trichinella live larvae	
Pritems	N. of samples	3 for each participant	
	Distribution	Immediate shipment after preparation	
Subcontracted activities	NA		
Results evaluation	Qualitative		

### Implementation

N. of participants	32		Pork	93
Public laboratories	32		Horse meat	3
Private laboratories	0	PT items	PT panel composition	3 positive samples, 4 larvae each
			Shipping	DHL
Shipping date	March 11, 2019			

Unit of Foodborne and Neglected Parasitic Diseases Istituto Superiore di Sanità

viale Regina Elena, 299 - 00161 Rome, Italy

Person in charge of PT: Dr Gianluca Marucci e-mail: gianluca.marucci@iss.it; tel: +39 0649902241



PTP N° 0005

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MO/MAQ/12.1.EN rev. 10 page 1 of 4



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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	N° of samples correctly identified	N° of samples NOT correctly identified	Final evaluation	
NRL1	3	0	positive	
NRL2	3	0	positive	
NRL3	3	0	positive	
NRL4	3	0	positive	
NRL5	3	0	positive	
NRL6	3	0	positive	
NRL7	3	0	positive	
NRL8	3	0	positive	
NRL9	3	0	positive	
NRL10	3	0	positive	
NRL11	3	0	positive	
NRL12	3	0	positive	
NRL13	3	0	positive	
NRL14	3	0	positive	
NRL15	3	0	positive	
NRL16	3	0	positive	
NRL17	3	0	positive	
NRL18	3	0	positive	
NRL19	3	0	positive	
NRL20	3	0	positive	
NRL21	3	0	positive	
NRL22	3	0	positive	
NRL23	3	0	positive	
NRL24	3	0	positive	
NRL25	3	0	positive	
NRL26	1	2	negative	
NRL35	3	0	positive	
NRL40	3	0	positive	
NRL41	3	0	positive	
NRL42	3	0	positive	
NRL47	3	0	positive	
TLE6	3	0	positive	

Legend: Laboratories that failed the PT are marked in red

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MO/MAQ/12.1.EN rev. 10 page 2 of 4



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#### **Summary of results:**

Number of participant laboratories	32
Number of participants that passed the PT	31
Number of participants that failed the PT	1

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

NRL code	2015	2016	2017	2018	2019
1	positive	negative	positive	positive	positive
2	positive	positive	positive	positive	positive
3	positive	positive	positive	positive	positive
4	positive	positive	positive	positive	positive
5	positive	positive	positive	positive	positive
6	positive	positive	positive	positive	positive
7	positive	positive	positive	positive	positive
8	positive	positive	positive	positive	positive
9	positive	positive	positive	positive	positive
10	positive	positive	positive	positive	positive
11	positive	positive	positive	positive	positive
12	positive	positive	positive	positive	positive
13	positive	positive	positive	positive	positive
14	positive	positive	positive	positive	positive
15	positive	negative	positive	positive	positive
16	positive	positive	positive	positive	positive
17	positive	positive	positive	positive	positive
18	positive	positive	positive	positive	positive
19	negative	positive	positive	positive	positive
20	positive	positive	positive	positive	positive
21	positive	positive	positive	positive	positive
22	positive	positive	positive	positive	positive
23	negative	positive	positive	negative	positive
24	positive	positive	positive	positive	positive
25	negative	positive	positive	positive	positive
26	positive	negative	positive	positive	negative
34	positive	positive	positive	-	positive
35	negative	positive	positive	positive	positive
40	positive	positive	positive	positive	positive
41	positive	-	positive	positive	positive
42	positive	positive	positive	positive	positive
47	-	-	positive	-	positive
TLE6	positive	positive	positive	positive	positive

Legend: Laboratories that failed the PT are marked in red

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MO/MAQ/12.1.EN rev. 10 page 3 of 4



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**Comments:** The laboratory NRL23 was invited to investigate the causes of the failure and to implement the appropriate corrective actions. In case the lab was interested in repeating the test, the shipment of a new sample panel (EQA scheme) will be arranged.

The Director Dr. S.M. Cacciò

Mimonell. Cacció

Date	30/05/2019

#### Notes:

- 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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MO/MAQ/12.1.EN rev. 10 page 4 of 4