

Istituto Superiore di Sanità

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



Final report PT -Td 1/2020

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

Implementation

N. of participants	5		Pork	15
Public laboratories	1		Horse meat	0
Private laboratories	4	PT items	PT panel composition	1 positive with 5 larvae and 2 negatives
			Shipping	DHL
Shipping date		February 17, 2020		

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PTP N° 0005 P

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC

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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	N° of "false	Final evaluation
		positives"	negatives"	
LPT19	pork 100g	0	0	positive
LPT29	pork 100g	0	0	positive
LPT32	pork 100g	0	0	positive
LET9	pork 100g	0	0	positive
LET11	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.).

Summary of results:

Number of participant laboratories	5
Number of participants that passed the PT	5
Number of participants that failed the PT	0

Overtime comparison of results (last five years)

Laboratory code	2016	2017	2018	2019	2020	
LPT19	-	positive	positive	positive	positive	
LPT29	positive	positive	positive	-	positive	
LPT32	-	-	-	-	positive	
LET9	-	positive	positive	-	positive	
LET11	-	-	-	positive	positive	

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 "e" 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).

Comments:

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The Director Dr. S.M. Cacciò

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Date 25/02/2020

Notes:

- To guarantee confidentiality, participant laboratories are identified by alphanumeric codes. PT participant identity is 1. 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.
- The organizer designates a qualified company for the transport and delivery of PT items.
- 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.
- 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).
- The final report issue of each PT round shows the PT program implementation.

End of the report

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