

Final report PT-Tm 1/2018

PT “Identification of *Trichinella* larvae at the species level by a molecular method”

Design

Purpose	Evaluation of laboratories in charge for official control on food	
Scheme type	Single	
Participants	Public and private, European laboratories	
N. of participants	Depending on request	
Method	not regulated	
Test method	chosen by the participant	
PT items	Matrix	not applicable
	Item	<i>Trichinella</i> spp. larvae in 96% ethanol
	N. of samples	4 vials for each participant (10 larvae/vial)
	Distribution	Preparation and packaging can be performed before shipment
Subcontracted activities	NA	
Results evaluation	Qualitative	

Implementation

N. of participants	22	PT items	PT panel 4 vials	10 larvae for each of the following species: <i>T. nativa</i> , <i>T. britovi</i> , <i>T. pseudospiralis</i> , and <i>T. zimbabwensis</i>
Public laboratories	0			
Private laboratories	0			
NRLs	22		Shipping	TNT Express
Shipping dates	March 12, 2018			

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PTP N° 0005

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Qualitative results

The PT final evaluation was qualitative only. The PT was considered passed if all isolates or, in case of single larvae at least one of them for each isolate, were correctly identified.

Laboratory code	N. right identification	N. wrong identification	N. missed identification	Final evaluation
NRL1	4	0	0	positive
NRL2	4	0	0	positive
NRL3	4	0	0	positive
NRL6	4	0	0	positive
NRL7	4	0	0	positive
NRL8	4	0	0	positive
NRL10	4	0	0	positive
NRL12	4	0	0	positive
NRL14	0	0	4	negative*
NRL16	4	0	0	positive
NRL17	4	0	0	positive
NRL18	-	-	-	results not submitted
NRL20	3	1	0	negative
NRL21	4	0	0	positive
NRL22	3	1	0	negative
NRL23	4	0	0	positive
NRL24	4	0	0	positive
NRL25	4	0	0	positive
NRL35	4	0	0	positive
NRL40	4	0	0	positive
NRL42	-	-	-	results not submitted
TLE6	3	1	0	negative

*the lab failed the test because of technical problems

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Summary of qualitative results:

Total number of PT panels	22
Number of participant laboratories	22
Number of participants that passed the PT	16*
Number of participants that failed the PT	4

*2 laboratories did not submit results

Overtime comparison of results

Laboratory code	PT 2011	PT 2012	PT 2013	PT 2014	PT 2015	PT 2016	PT 2017	PT 2018
NRL1	positive	positive	positive	positive	positive	negative	negative	positive
NRL2	-	-	-	negative	-	-	positive	positive
NRL3	negative	-	positive	positive	positive	positive	negative	positive
NRL4	positive	positive	positive	positive	-	positive	-	-
NRL6	positive	positive	negative	positive	negative	positive	positive	positive
NRL7	-	negative	negative	positive	positive	positive	positive	positive
NRL8	positive							
NRL9	negative	-	negative	-	-	-	-	-
NRL10	negative	positive	-	positive	positive	positive	positive	positive
NRL11	positive	negative	positive	positive	-	-	-	-
NRL12	-	-	positive	-	positive	positive	positive	positive
NRL14	-	-	-	-	-	negative	negative	negative
NRL16	positive	positive	positive	positive	positive	positive	negative	positive
NRL17	-	-	-	positive	positive	negative	positive	positive
NRL18	-	-	-	-	-	NA*	positive	NA*
NRL20	-	-	-	-	-	-	-	negative
NRL21	positive	negative	positive	positive	positive	negative	positive	positive
NRL22	-	positive	negative	negative	positive	positive	positive	negative
NRL23	-	positive						
NRL24	negative	-	positive	positive	positive	positive	positive	positive
NRL25	-	-	positive	positive	positive	negative	positive	positive
NRL34	negative	negative	positive	positive	positive	negative	-	-
NRL35	negative	negative	-	negative	positive	negative	positive	positive
NRL38	positive	-	-	-	-	-	-	-
NRL40	-	positive	-	-	-	-	positive	positive
NRL42	-	-	-	negative	-	NA*	negative	NA*
NRL44	-	-	-	negative	-	-	-	-
NRL45	-	-	-	-	negative	-	-	-
NRL46	-	-	-	-	-	-	positive	-
TLE6	-	-	-	-	-	positive	-	negative

*results not submitted

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Comments: The main reason for the PT failure was the incorrect identification of the band pattern of the non-European species present in the sample panel. An improvement in results interpretation is necessary.

The Director
Dr. E. Pozio



Date 10/04/2018

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 4 or 12 1.5 ml vials containing four different *Trichinella spp.* The homogeneity of PT items is ensured by an accurate control of the number of larvae spiked into each vial (item), made by two operators using a stereo microscope. PT items are stable for 5 years 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 sending an email to the NRLs.
5. The final report issued for each PT round shows the PT program implementation.

End of the report

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