

Final report PT-An 1/2018

PT report on “Detection of Anisakidae L3 larvae in fish fillets”

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	fresh water farmed fish fillet
	Item	Anisakidae live larvae
	N. of samples	3 for each participant
	Distribution	Immediate shipment after preparation
Subcontracted activities	NA	
Results evaluation	Qualitative	

Implementation

N. of participants	29	PT items	fish fillet sandwiches	87
Public laboratories	4		PT panel composition	3 fish fillet sandwiches: one spiked with 3 larvae and two spiked with 0 larva each
Private laboratories	1			
NRL	24		Shipping	TNT Express
Shipping dates	12/03/2018			

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PTP N° 0005

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 EA, IAF e ILAC

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Results

The PT final evaluation was qualitative only. The PT was considered passed if all positive and all negative samples were correctly identified by the participant.

Laboratory code	N° of samples correctly identified	N° of samples NOT correctly identified	Final evaluation
A1	3	0	Positive
A2	3	0	Positive
A3	3	0	Positive
A5	3	0	Positive
A6	3	0	Positive
A7	3	0	Positive
A8	3	0	Positive
A9	3	0	Positive
A10	3	0	Positive
A11	3	0	Positive
A12	3	0	Positive
A13	3	0	Positive
A15	3	0	Positive
A16	3	0	Positive
A17	3	0	Positive
A18	3	0	Positive
A19	3	0	Positive
A20	3	0	Positive
A21	3	0	Positive
A25	3	0	Positive
A26	3	0	Positive
A28	3	0	Positive
A29	3	0	Positive
A30	3	0	Positive
A31	3	0	Positive
A35	3	0	Positive
A36	3	0	Positive
A37	2	1	Negative
A38	3	0	Positive

Legend:

- Laboratories that failed the PT are marked in bold.

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Summary of results:

Total number of PT panels	29
Number of participant laboratories	29
Number of participants that passed the PT	28
Number of participants that failed the PT	1

Overtime comparison of results

Laboratory code	2014	2015	2016	2017	2018
A1	P	P	P	P	P
A2	P	P	P	N	P
A3	N	P	P	P	P
A5	P	P	P	P	P
A6	P	P	P	P	P
A7	P	P	P	P	P
A8	P	P	P		P
A9	P		P	N	P
A10	P	P	N	P	P
A11	P	N	P	N	P
A12	P	N	P	P	P
A13	P	P	P	N	P
A15	P	P	P	P	P
A16	N	P	P	N	P
A17	NR		P	P	P
A18	P	P	P	P	P
A19	P	P	P	P	P
A20	P	P	P	P	P
A21	P	P	P	P	P
A23/A33*	N	P	P	N	P
A26	P	P	P	P	P
A28	P		P	P	P
A29			P		P
A30		P	P	P	P
A31		P	P	P	P
A35					P
A36				P	P
A37					N
A38					P

Note: P, positive; N, negative; NR, no result received; gray boxed, no participation

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Comments:

This PT round resulted in 95% of the laboratories (28/29) that passed the PT. Only one lab failed the PT reporting a false negative likely cause only the low sensitive candling method was used. Noteworthy, three laboratories overestimated the number of spiked larvae, all reporting 4 larvae instead of 3. Since the PT is only qualitative, presence absence of the larvae, the PT was considered positive but the laboratories were invited to take into consideration the overestimation and take appropriate actions including further training of the analyst on morphological identification of the larvae. No further corrective action was required.

A general increase in the performance of the participant laboratories was highlighted by this PT round.

Over the last years, the number of PT participants is stable (27 in 2017 and 30 in 2016) as well as the relative percentage of detection methods adopted. Artificial digestion is still the prevalent method applied, largely because it doesn't require any special equipment. UV-press method is applied only in laboratory with a high number of fish samples to be routinely inspected. Low sensitive methods, compressorium and candling, were almost exclusively used only in combination with artificial digestion or UV-press method.

The Director
Dr. E. Pozio

Date 03/05/2018

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 a fish fillet sandwich spiked or not with live Anisakidae 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. PT items are stable for 7 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 sending an email to the NRLs
5. The final report issue of each PT round shows the PT program implementation.

End of the report

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