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172-PT

# **PROFICIENCY TESTING 2011**

***SALMONELLA (SAL)***

***Isolation of Salmonella sp. from faeces***

**OPERATIONAL UNIT  
COORDINATION OF VETERINARY DIAGNOSIS  
EPIDEMIOLOGY AND RISK ASSESSMENT  
(CVD-ERA)**

**DATE BEGIN PT: 24 OCTOBER 2011**

**DATE REPORT: 22 DECEMBER 2011**

## I. Introduction

Details relevant to the proficiency test (PT) are available in the Procedure PRO/2.5/01 'Beheer van de proficiency testen op het CODA-Ukkel/Gestion des essais d'aptitude au CERVA-Uccle', which is summarized in the 'Manual for the participant'.

This PT replaces the previously organized PT2011SALBAC (week 19), which could not be validated by the operational unit CVD-ERA of the Veterinary and Agrochemical Research Centre (CODA-CERVA) because discordant results were obtained during the verification tests (see email sent on 1<sup>st</sup> of June 2011).

## II. Aim

The aim of this PT was to evaluate the ability of the participating laboratories to identify the absence or presence of *Salmonella* sp. in faeces.

## III. Materials and methods

### III.1. Conduct of diagnostic tests

In the framework of this PT, predefined faecal samples must be analyzed by means of *Salmonella* isolation tests (ISO 6579). The procedures for the isolation tests must be fully described in the SOPs of the participating laboratories.

### III.2. Reference samples

Faeces were collected from cattle (2 animals), aliquoted per 10g and stored in the freezer (<-16°C). At least 10 aliquots per animal (i.e., approximately 4% of the aliquots per animal) were analysed on different days for the presence of *Salmonella* sp. by the *Salmonella* reference laboratory of CODA-CERVA, hereby following method ISO 6579 (both using the combination MKTTn/RVS and MSRV as enrichment media). Since all aliquots were found negative for *Salmonella* sp., the collected faeces were considered as *Salmonella* negative and hence the remaining aliquots as suitable for the PT.

Subsequently, some of the remaining aliquots were artificially contaminated with *Salmonella* by inoculating the *Salmonella* negative faeces with either 10 colony forming units (cfu) or 50 cfu of *Salmonella* Cerro (antigenic formula O6,14,18:Z<sub>4</sub>,Z<sub>23</sub>:1[5]). *Salmonella* Cerro was chosen as inoculation strain because this serotype is rarely encountered among food producing animals in Belgium. All inoculated faecal samples were found positive for *Salmonella* Cerro. Hence, these bacterial charges were considered as appropriate to prepare weak and strong *Salmonella* positive faecal samples, respectively.

One week before the PT, the *Salmonella* reference laboratory and the operational unit CVD-ERA from CODA-CERVA organized an internal trial PT. Herefore, 15 aliquots were used as such and thus considered as negative faecal samples, whereas 15 weak positive and 15 strong positive faecal samples were prepared by inoculating negative faecal samples with 4 cfu and 35 cfu *Salmonella* Cerro, respectively. Ten faecal samples of each category (negative, weak positive, strong positive) were analysed on day 1 and five faecal samples of each category were analysed on day 2. Both analyses were performed using ready-to-use MSRV medium from Bio-Rad (batch 03326). All results were according to the assigned sample status.

On 24<sup>th</sup> of October 2011 (start of the PT), 230 aliquots of faecal samples were prepared and randomized, either for the PT (200 aliquots) or the verification tests that had to be performed by the *Salmonella* reference laboratory from CODA-CERVA (30 aliquots):

- 130 aliquots (120 for the PT and 10 for the verification tests) were used as such and considered as negative faecal samples ('PT2011SALBACNF1')
- 60 aliquots (50 for the PT and 10 for the verification tests) were inoculated with 55 cfu *Salmonella* Cerro and were considered as strong positive faecal samples ('PT2011SALBACPF1').
- 40 aliquots (30 for the PT and 10 for the verification tests) were inoculated with 20 cfu *Salmonella* Cerro and were considered as weak positive faecal samples ('PT2011SALBACPF2').

In total, 200 aliquots of faecal samples were distributed to 10 participating laboratories. All participants were given 20 aliquots of faecal samples: 12 aliquots of the negative faecal sample PT2011SALBACNF1, 5 aliquots of the strong positive faecal sample PT2011SALBACPF1 (55 cfu) and 3 aliquots of the weak positive faecal sample PT2011SALBACPF2 (20 cfu). Besides a sample identification number, all aliquots contained a random number in order to allow a double verification of the sample status by the PT provider. Labelling of the aliquots with this random number occurred the day before the PT, thus before artificial contamination of the faeces.

For most PTs, the PT samples can be made in bulk and subsequently aliquoted. In order to confirm the status of these PT samples, at least 10 aliquots of each PT sample are analysed before the start of the PT. In contrast, for this bacteriology PT, the verification tests can only be performed on samples similar as those sent to the participants and in parallel with the PT (cfr. Manual for the participant, section III.1). Therefore, the *Salmonella* reference laboratory from CODA-CERVA tested 5 aliquots of each category of faecal samples for the presence of *Salmonella* on both 24<sup>th</sup> (day 1) and 25<sup>th</sup> (day 2) of October 2011. All 10 aliquots of the faecal sample PT2011SALBACNF1 scored negative, whereas all 10 aliquots of the faecal samples PT2011SALBACPF1 and PT2011SALBACPF2 scored positive. Consequently, the negative and positive (strong and weak) faecal samples were in line with their assigned status (positive or negative) and hence considered as reliable samples to evaluate the absence or presence of *Salmonella* sp. in faeces.

### **III.3. Classification of results, level of agreement and threshold for qualification**

#### **III.3.1. Classification of results**

Results provided by the participating laboratories are categorized as *success* (positive result when the sample is truly positive, negative result when the sample is truly negative) or *failure* (positive result when the sample is truly negative, negative result when the sample is truly positive).

#### **III.3.2. Level of agreement**

The level of agreement achieved by the participating laboratories is expressed as the percentage of *success* (i.e., the reported result matches with the assigned status) for all 20 faecal samples (aliquots) used for this PT.

#### **III.3.3. Threshold for qualification**

Following the procedure, a participating laboratory is only qualified if the level of agreement for all 20 faecal samples (aliquots) is at least 90%.

## **IV. Results**

For confidentiality reasons, the participating laboratories are quoted anonymously and the concordance table is safely kept at the operational unit CVD-ERA of CODA-CERVA.

### **IV.1. Transfer and start of the analyses of the reference samples**

The 20 aliquots of faecal samples were sent to each of the 10 participating laboratories by national courier on 24<sup>th</sup> of October 2011 (200 aliquots in total). All laboratories acknowledged receipt of the samples on the same day. Analyses started on 24<sup>th</sup> (LAB2, LAB3, LAB5 and LAB6) and 25<sup>th</sup> (LAB4, LAB7 and LAB10) of October 2011. LAB1, LAB8 and LAB9 did not communicate the start date of analysis (Table 1).

### **IV.2. Dates at which results were returned to the operational unit CVD-ERA**

Results from the participating laboratories have been received between 28<sup>th</sup> of October and 3<sup>rd</sup> of November 2011. LAB1 hereby exceeded the deadline of 31<sup>st</sup> of October 2011 for submission of the results (Table 1).

**Table 1.** Overview of the dates on which (i) the faecal samples were received and analyzed by the participating laboratories, and (ii) the obtained results were submitted to the operational unit CVD-ERA of CODA-CERVA.

Laboratory	Reference samples received on	Start of analysis	Excel spreadsheet sent back on
LAB1	24/10/2011	NOT PROVIDED	03/11/2011
LAB2	24/10/2011	24/10/2011	31/10/2011
LAB3	24/10/2011	24/10/2011	28/10/2011
LAB4	24/10/2011	25/10/2011	29/10/2011
LAB5	24/10/2011	24/10/2011	28/10/2011
LAB6	24/10/2011	24/10/2011	31/10/2011
LAB7	24/10/2011	25/10/2011	31/10/2011
LAB8	24/10/2011	24/10/2011	28/10/2011
LAB9	24/10/2011	NOT PROVIDED	31/10/2011
LAB10	24/10/2011	25/10/2011	31/10/2011

### IV.3. Compliance with the procedure

All participating laboratories have provided a duly dated and signed copy of the results.

### IV.4. Qualitative data analysis

#### IV.4.1. Level of agreement

Qualitative data analysis showed that 6 out of 10 participating laboratories (LAB1, LAB2, LAB5, LAB7, LAB8 and LAB10) provided qualitative results that were in full agreement with the true status of the faecal samples (100% of agreement). LAB3, LAB4, LAB6 and LAB9 misclassified 1 faecal sample and hence obtained 95.0% of agreement (Table 2).

**Table 2.** Agreement between results generated by the participating laboratories (LABNR) and the status of the faecal samples assigned by the *Salmonella* reference laboratory of CODA-CERVA. All participating laboratories received 20 faecal samples (aliquots). Results are presented as absolute values and percentages (in parentheses).

	LABNR									
	1	2	3	4	5	6	7	8	9	10
failure	0 (0.0)	0 (0.0)	1 (5.0)	1 (5.0)	0 (0.0)	1 (5.0)	0 (0.0)	0 (0.0)	1 (5.0)	0 (0.0)
success	20 (100.0)	20 (100.0)	19 (95.0)	19 (95.0)	20 (100.0)	19 (95.0)	20 (100.0)	20 (100.0)	19 (95.0)	20 (100.0)

#### IV.4.2. Variability among participating laboratories

At the qualitative data level, no variability between LAB1, LAB2, LAB5, LAB7, LAB8 and LAB10 could be observed since these participants correctly identified all faecal samples. In contrast, LAB4 misclassified 1 aliquot of the weak positive faecal sample PT2011SALBACPF2 (NEG instead of POS), whereas LAB3, LAB6 and LAB9 misclassified 1 aliquot of the negative faecal sample PT2011SALBACNF1 (POS instead of NEG).

For each participating laboratory, the obtained results and the assigned statuses for the faecal samples are shown in Table 3.

**Table 3.** The responses (RESULT) of the participating laboratories (LABNR) with the internal identification of the faecal samples (SAMPLE), the external identification of the faecal samples (LABPOSIT), and the status assigned by the *Salmonella* reference laboratory of CODA-CERVA (STATUS). NEG: negative; POS: positive.

	LABNR	LABPOSIT	SAMPLE	STATUS	RESULT	SUCCESS
1	1	1	PT2011SALBACNF1	NEG	NEG	1
2	1	2	PT2011SALBACPF1	POS	POS	1
3	1	3	PT2011SALBACPF1	POS	POS	1
4	1	4	PT2011SALBACNF1	NEG	NEG	1
5	1	5	PT2011SALBACNF1	NEG	NEG	1
6	1	6	PT2011SALBACPF2	POS	POS	1
7	1	7	PT2011SALBACNF1	NEG	NEG	1
8	1	8	PT2011SALBACPF1	POS	POS	1
9	1	9	PT2011SALBACNF1	NEG	NEG	1
10	1	10	PT2011SALBACPF2	POS	POS	1
11	1	11	PT2011SALBACNF1	NEG	NEG	1
12	1	12	PT2011SALBACPF1	POS	POS	1
13	1	13	PT2011SALBACNF1	NEG	NEG	1
14	1	14	PT2011SALBACNF1	NEG	NEG	1
15	1	15	PT2011SALBACPF1	POS	POS	1
16	1	16	PT2011SALBACNF1	NEG	NEG	1
17	1	17	PT2011SALBACNF1	NEG	NEG	1
18	1	18	PT2011SALBACPF2	POS	POS	1
19	1	19	PT2011SALBACNF1	NEG	NEG	1
20	1	20	PT2011SALBACNF1	NEG	NEG	1
21	2	1	PT2011SALBACNF1	NEG	NEG	1
22	2	2	PT2011SALBACNF1	NEG	NEG	1
23	2	3	PT2011SALBACPF2	POS	POS	1
24	2	4	PT2011SALBACNF1	NEG	NEG	1
25	2	5	PT2011SALBACNF1	NEG	NEG	1
26	2	6	PT2011SALBACNF1	NEG	NEG	1
27	2	7	PT2011SALBACPF1	POS	POS	1
28	2	8	PT2011SALBACPF1	POS	POS	1
29	2	9	PT2011SALBACNF1	NEG	NEG	1
30	2	10	PT2011SALBACNF1	NEG	NEG	1
31	2	11	PT2011SALBACPF2	POS	POS	1
32	2	12	PT2011SALBACNF1	NEG	NEG	1
33	2	13	PT2011SALBACPF1	POS	POS	1
34	2	14	PT2011SALBACNF1	NEG	NEG	1
35	2	15	PT2011SALBACPF2	POS	POS	1
36	2	16	PT2011SALBACNF1	NEG	NEG	1
37	2	17	PT2011SALBACPF1	POS	POS	1
38	2	18	PT2011SALBACNF1	NEG	NEG	1
39	2	19	PT2011SALBACNF1	NEG	NEG	1
40	2	20	PT2011SALBACPF1	POS	POS	1



(Table 3 - CONTINUED)

	LABNR	LABPOSIT	SAMPLE	STATUS	RESULT	SUCCESS
41	3	1	PT2011SALBACNF1	NEG	NEG	1
42	3	2	PT2011SALBACNF1	NEG	NEG	1
43	3	3	PT2011SALBACPF2	POS	POS	1
44	3	4	PT2011SALBACNF1	NEG	POS	0
45	3	5	PT2011SALBACNF1	NEG	NEG	1
46	3	6	PT2011SALBACNF1	NEG	NEG	1
47	3	7	PT2011SALBACPF1	POS	POS	1
48	3	8	PT2011SALBACPF1	POS	POS	1
49	3	9	PT2011SALBACNF1	NEG	NEG	1
50	3	10	PT2011SALBACNF1	NEG	NEG	1
51	3	11	PT2011SALBACPF2	POS	POS	1
52	3	12	PT2011SALBACNF1	NEG	NEG	1
53	3	13	PT2011SALBACPF1	POS	POS	1
54	3	14	PT2011SALBACNF1	NEG	NEG	1
55	3	15	PT2011SALBACPF2	POS	POS	1
56	3	16	PT2011SALBACNF1	NEG	NEG	1
57	3	17	PT2011SALBACPF1	POS	POS	1
58	3	18	PT2011SALBACNF1	NEG	NEG	1
59	3	19	PT2011SALBACNF1	NEG	NEG	1
60	3	20	PT2011SALBACPF1	POS	POS	1
61	4	1	PT2011SALBACNF1	NEG	NEG	1
62	4	2	PT2011SALBACPF1	POS	POS	1
63	4	3	PT2011SALBACPF1	POS	POS	1
64	4	4	PT2011SALBACNF1	NEG	NEG	1
65	4	5	PT2011SALBACNF1	NEG	NEG	1
66	4	6	PT2011SALBACPF2	POS	POS	1
67	4	7	PT2011SALBACNF1	NEG	NEG	1
68	4	8	PT2011SALBACPF1	POS	POS	1
69	4	9	PT2011SALBACNF1	NEG	NEG	1
70	4	10	PT2011SALBACPF2	POS	POS	1
71	4	11	PT2011SALBACNF1	NEG	NEG	1
72	4	12	PT2011SALBACPF1	POS	POS	1
73	4	13	PT2011SALBACNF1	NEG	NEG	1
74	4	14	PT2011SALBACNF1	NEG	NEG	1
75	4	15	PT2011SALBACPF1	POS	POS	1
76	4	16	PT2011SALBACNF1	NEG	NEG	1
77	4	17	PT2011SALBACNF1	NEG	NEG	1
78	4	18	PT2011SALBACPF2	POS	NEG	0
79	4	19	PT2011SALBACNF1	NEG	NEG	1
80	4	20	PT2011SALBACNF1	NEG	NEG	1



(Table 3 - CONTINUED)

	LABNR	LABPOSIT	SAMPLE	STATUS	RESULT	SUCCESS
81	5	1	PT2011SALBACPF2	POS	POS	1
82	5	2	PT2011SALBACNF1	NEG	NEG	1
83	5	3	PT2011SALBACPF1	POS	POS	1
84	5	4	PT2011SALBACNF1	NEG	NEG	1
85	5	5	PT2011SALBACPF2	POS	POS	1
86	5	6	PT2011SALBACNF1	NEG	NEG	1
87	5	7	PT2011SALBACPF1	POS	POS	1
88	5	8	PT2011SALBACNF1	NEG	NEG	1
89	5	9	PT2011SALBACNF1	NEG	NEG	1
90	5	10	PT2011SALBACPF1	POS	POS	1
91	5	11	PT2011SALBACNF1	NEG	NEG	1
92	5	12	PT2011SALBACNF1	NEG	NEG	1
93	5	13	PT2011SALBACPF2	POS	POS	1
94	5	14	PT2011SALBACNF1	NEG	NEG	1
95	5	15	PT2011SALBACNF1	NEG	NEG	1
96	5	16	PT2011SALBACNF1	NEG	NEG	1
97	5	17	PT2011SALBACPF1	POS	POS	1
98	5	18	PT2011SALBACPF1	POS	POS	1
99	5	19	PT2011SALBACNF1	NEG	NEG	1
100	5	20	PT2011SALBACNF1	NEG	NEG	1
101	6	1	PT2011SALBACNF1	NEG	NEG	1
102	6	2	PT2011SALBACPF1	POS	POS	1
103	6	3	PT2011SALBACNF1	NEG	NEG	1
104	6	4	PT2011SALBACNF1	NEG	NEG	1
105	6	5	PT2011SALBACPF1	POS	POS	1
106	6	6	PT2011SALBACNF1	NEG	NEG	1
107	6	7	PT2011SALBACNF1	NEG	NEG	1
108	6	8	PT2011SALBACPF2	POS	POS	1
109	6	9	PT2011SALBACNF1	NEG	NEG	1
110	6	10	PT2011SALBACNF1	NEG	NEG	1
111	6	11	PT2011SALBACNF1	NEG	NEG	1
112	6	12	PT2011SALBACPF1	POS	POS	1
113	6	13	PT2011SALBACPF1	POS	POS	1
114	6	14	PT2011SALBACNF1	NEG	POS	0
115	6	15	PT2011SALBACNF1	NEG	NEG	1
116	6	16	PT2011SALBACPF2	POS	POS	1
117	6	17	PT2011SALBACNF1	NEG	NEG	1
118	6	18	PT2011SALBACPF1	POS	POS	1
119	6	19	PT2011SALBACNF1	NEG	NEG	1
120	6	20	PT2011SALBACPF2	POS	POS	1



(Table 3 - CONTINUED)

	LABNR	LABPOSIT	SAMPLE	STATUS	RESULT	SUCCESS
121	7	1	PT2011SALBACNF1	NEG	NEG	1
122	7	2	PT2011SALBACPF1	POS	POS	1
123	7	3	PT2011SALBACNF1	NEG	NEG	1
124	7	4	PT2011SALBACNF1	NEG	NEG	1
125	7	5	PT2011SALBACPF1	POS	POS	1
126	7	6	PT2011SALBACNF1	NEG	NEG	1
127	7	7	PT2011SALBACNF1	NEG	NEG	1
128	7	8	PT2011SALBACPF2	POS	POS	1
129	7	9	PT2011SALBACNF1	NEG	NEG	1
130	7	10	PT2011SALBACNF1	NEG	NEG	1
131	7	11	PT2011SALBACNF1	NEG	NEG	1
132	7	12	PT2011SALBACPF1	POS	POS	1
133	7	13	PT2011SALBACPF1	POS	POS	1
134	7	14	PT2011SALBACNF1	NEG	NEG	1
135	7	15	PT2011SALBACNF1	NEG	NEG	1
136	7	16	PT2011SALBACPF2	POS	POS	1
137	7	17	PT2011SALBACNF1	NEG	NEG	1
138	7	18	PT2011SALBACPF1	POS	POS	1
139	7	19	PT2011SALBACNF1	NEG	NEG	1
140	7	20	PT2011SALBACPF2	POS	POS	1
141	8	1	PT2011SALBACPF2	POS	POS	1
142	8	2	PT2011SALBACNF1	NEG	NEG	1
143	8	3	PT2011SALBACPF1	POS	POS	1
144	8	4	PT2011SALBACNF1	NEG	NEG	1
145	8	5	PT2011SALBACPF2	POS	POS	1
146	8	6	PT2011SALBACNF1	NEG	NEG	1
147	8	7	PT2011SALBACPF1	POS	POS	1
148	8	8	PT2011SALBACNF1	NEG	NEG	1
149	8	9	PT2011SALBACNF1	NEG	NEG	1
150	8	10	PT2011SALBACPF1	POS	POS	1
151	8	11	PT2011SALBACNF1	NEG	NEG	1
152	8	12	PT2011SALBACNF1	NEG	NEG	1
153	8	13	PT2011SALBACPF2	POS	POS	1
154	8	14	PT2011SALBACNF1	NEG	NEG	1
155	8	15	PT2011SALBACNF1	NEG	NEG	1
156	8	16	PT2011SALBACNF1	NEG	NEG	1
157	8	17	PT2011SALBACPF1	POS	POS	1
158	8	18	PT2011SALBACPF1	POS	POS	1
159	8	19	PT2011SALBACNF1	NEG	NEG	1
160	8	20	PT2011SALBACNF1	NEG	NEG	1





(Table 3 - CONTINUED)

	LABNR	LABPOSIT	SAMPLE	STATUS	RESULT	SUCCESS
161	9	1	PT2011SALBACNF1	NEG	NEG	1
162	9	2	PT2011SALBACPF1	POS	POS	1
163	9	3	PT2011SALBACPF1	POS	POS	1
164	9	4	PT2011SALBACNF1	NEG	NEG	1
165	9	5	PT2011SALBACNF1	NEG	NEG	1
166	9	6	PT2011SALBACPF2	POS	POS	1
167	9	7	PT2011SALBACNF1	NEG	NEG	1
168	9	8	PT2011SALBACPF1	POS	POS	1
169	9	9	PT2011SALBACNF1	NEG	NEG	1
170	9	10	PT2011SALBACPF2	POS	POS	1
171	9	11	PT2011SALBACNF1	NEG	POS	0
172	9	12	PT2011SALBACPF1	POS	POS	1
173	9	13	PT2011SALBACNF1	NEG	NEG	1
174	9	14	PT2011SALBACNF1	NEG	NEG	1
175	9	15	PT2011SALBACPF1	POS	POS	1
176	9	16	PT2011SALBACNF1	NEG	NEG	1
177	9	17	PT2011SALBACNF1	NEG	NEG	1
178	9	18	PT2011SALBACPF2	POS	POS	1
179	9	19	PT2011SALBACNF1	NEG	NEG	1
180	9	20	PT2011SALBACNF1	NEG	NEG	1
181	10	1	PT2011SALBACNF1	NEG	NEG	1
182	10	2	PT2011SALBACNF1	NEG	NEG	1
183	10	3	PT2011SALBACPF2	POS	POS	1
184	10	4	PT2011SALBACNF1	NEG	NEG	1
185	10	5	PT2011SALBACNF1	NEG	NEG	1
186	10	6	PT2011SALBACNF1	NEG	NEG	1
187	10	7	PT2011SALBACPF1	POS	POS	1
188	10	8	PT2011SALBACPF1	POS	POS	1
189	10	9	PT2011SALBACNF1	NEG	NEG	1
190	10	10	PT2011SALBACNF1	NEG	NEG	1
191	10	11	PT2011SALBACPF2	POS	POS	1
192	10	12	PT2011SALBACNF1	NEG	NEG	1
193	10	13	PT2011SALBACPF1	POS	POS	1
194	10	14	PT2011SALBACNF1	NEG	NEG	1
195	10	15	PT2011SALBACPF2	POS	POS	1
196	10	16	PT2011SALBACNF1	NEG	NEG	1
197	10	17	PT2011SALBACPF1	POS	POS	1
198	10	18	PT2011SALBACNF1	NEG	NEG	1
199	10	19	PT2011SALBACNF1	NEG	NEG	1
200	10	20	PT2011SALBACPF1	POS	POS	1

## V. Discussion

The purpose of this PT was to assess the performances of the participating laboratories when analyzing faecal samples for the detection of *Salmonella* sp. by bacteriological isolation.

Six out of ten participating laboratories provided qualitative results that were in full agreement with the true status of the faecal samples: LAB1, LAB2, LAB5, LAB7, LAB8 and LAB10. The other participants misclassified 1 faecal sample (95.0% of agreement): LAB3, LAB6 and LAB9 misclassified 1 aliquot of the negative faecal sample PT2011SALBACNF1 (POS instead of NEG), whereas LAB4 misclassified 1 aliquot of the weak positive faecal sample PT2011SALBACPF2 (NEG instead of POS) (Table 2 and Table 3). Because the random numbers (see III.2) matched with the assigned sample status for all faecal samples, an error during randomization of the samples could be excluded. The 3 participating laboratories reporting a false-positive result were asked to submit an isolate of these particular samples to the *Salmonella* reference laboratory of CODA-CERVA in order to serotype these *Salmonella* isolates. For both LAB6 and LAB9, the submitted isolates were identified as *Salmonella* Cerro, indicating a cross contamination during handling of the faeces samples. LAB3 already discarded the plates and could hence not submit an isolate of the false-positive sample.

In summary, qualitative data obtained in this PT showed that all participating laboratories achieved a satisfactory performance for the isolation of *Salmonella* sp. from faeces.

## VI. Conclusions

According to the procedure currently in force, the performance of a participating laboratory is satisfactory if at least 90% of the results provided by this laboratory is in agreement with the status of the faecal samples assigned by the *Salmonella* reference laboratory of CODA-CERVA (see III.3.3.). Consequently, all participants achieved a satisfactory performance for the isolation of *Salmonella* sp. from faeces.

Head CVD-ERA  
Yves Van der Stede

# Appendix

## Name of the participating laboratories

Association Régionale de Santé et d'Identification Animales (ARSIA) (Loncin, Belgium)

Dierengezondheidszorg Vlaanderen (DGZ) (Torhout, Belgium)

FLVVM (Melle, Belgium)

Laboratoire de Médecine Vétérinaire de l'Etat (LMVE) (Grand Duchy of Luxemburg)

Lavetan (Turnhout, Belgium)

LFSAGx (Gembloux, Belgium)

MicroBioMetrix (Sint-Katelijne-Waver, Belgium)

Plukon Poultry Laboratory (Wezep, The Netherlands)

Servaco Food Control (Wetteren, Belgium)

Veterinary and Agrochemical Research Center (CODA-CERVA) (Ukkel, Belgium)