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172-PT

PROFICIENCY TESTING 2012

SALMONELLA (SAL)

Isolation of Salmonella sp. from faeces

OPERATIONAL UNIT

COORDINATION OF VETERINARY DIAGNOSIS

EPIDEMIOLOGY AND RISK ASSESSMENT

(CVD-ERA)

DATE BEGIN PT: 15 OCTOBER 2012

DATE REPORT: 19 NOVEMBER 2012

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-CERVA-Ukkel/Gestion des essais d'aptitude au CODA-CERVA-Uccle', which is summarized in the 'Manual for the participant'.

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 as described in ISO 6579, annex D. The procedures for the isolation tests must be fully described in the SOPs of the participating laboratories.

III.2. Reference samples

Faeces collected from cattle (3 animals) were homogenized, aliquoted per 10g and stored in the freezer. Approximately 7% of the yet unfrozen aliquots were analyzed on different days for the presence of *Salmonella* sp. by the *Salmonella* reference laboratory of the Veterinary and Agrochemical Research Center (CODA-CERVA), hereby following method ISO 6579, annex D. Since all tested 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.

On 15th of October 2012 (start date 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 of CODA-CERVA in parallel with the PT (30 aliquots):

- 130 aliquots (120 for the PT and 10 for the verification tests) were used as such and considered as negative faecal samples ('PT2012SALBACNF1')
- 60 aliquots (50 for the PT and 10 for the verification tests) were inoculated with 150 cfu *Salmonella* Typhimurium (antigenic formula O4,5,12:i:1,2) and were considered as strong positive faecal samples ('PT2012SALBACPF1').
- 40 aliquots (30 for the PT and 10 for the verification tests) were inoculated with 100 cfu *Salmonella* Typhimurium (antigenic formula O4,5,12:i:1,2) and were considered as weak positive faecal samples ('PT2012SALBACPF2').

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 PT2012SALBACNF1, 5 aliquots of the strong positive faecal sample PT2012SALBACPF1 and 3 aliquots of the weak positive faecal sample PT2012SALBACPF2.

For most PTs organized by the operational unit CVD-ERA of CODA-CERVA, the PT samples can be made in bulk and subsequently aliquoted. In order to confirm the status of these PT samples and to check the homogeneity of the aliquoted samples, 10 aliquots of each PT sample are analyzed 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 of CODA-CERVA tested 5 aliquots of each category of faecal samples for the presence of *Salmonella* on both 15th (day 1) and 16th (day 2) of October 2012. All 10 aliquots of the faecal sample PT2012SALBACNF1 scored negative, whereas all 10 aliquots of the faecal samples PT2012SALBACPF1 and PT2012SALBACPF2 scored positive. Consequently, the negative and positive faecal samples were in line with their assigned status 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 the 20 aliquots of faecal samples 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 the 20 aliquots of faecal samples 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 at 5±3°C to each of the 10 participating laboratories by national courier on 15th of October 2012 (200 aliquots in total). All laboratories acknowledged receipt of the samples on the same day. Analyses were started on 15th (LAB2 and LAB8) and 16th (LAB1, LAB4, LAB5 and LAB9) of October 2012, as indicated in the instructions provided by the PT provider. Noteworthy, LAB3, LAB6, LAB7 and LAB10 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 22th and 31st of October 2012. LAB3, LAB9 and LAB10 hereby exceeded the deadline of 24th of October 2012 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	Start of analysis	Submission of the results (Excel file)
LAB1	15/10/2012	16/10/2012	24/10/2012
LAB2	15/10/2012	15/10/2012	22/10/2012
LAB3	15/10/2012	**NOT PROVIDED**	**25/10/2012**
LAB4	15/10/2012	16/10/2012	24/10/2012
LAB5	15/10/2012	16/10/2012	24/10/2012
LAB6	15/10/2012	**NOT PROVIDED**	24/10/2012
LAB7	15/10/2012	**NOT PROVIDED**	24/10/2012
LAB8	15/10/2012	15/10/2012	24/10/2012
LAB9	15/10/2012	16/10/2012	**25/10/2012**
LAB10	15/10/2012	**NOT PROVIDED**	**31/10/2012**

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 3 out of 10 participating laboratories provided qualitative results that were in full agreement with the true status of the faecal samples and hence reached 100% of agreement: LAB2, LAB4 and LAB5. In contrast, LAB1, LAB3, LAB8 and LAB10 misclassified 1 aliquot (95% of agreement), whereas LAB6, LAB7 and LAB9 misclassified 3 aliquots (85% 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 aliquots of faecal samples. Results are presented as absolute values and percentages (in parentheses).

	LABNR									
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
failure	1 (5.0)	0 (0.0)	1 (5.0)	0 (0.0)	0 (0.0)	**3 (15.0)**	**3 (15.0)**	1 (5.0)	**3 (15.0)**	1 (5.0)
success	19 (95.0)	20 (100.0)	19 (95.0)	20 (100.0)	20 (100.0)	**17 (85.0)**	**17 (85.0)**	19 (95.0)	**17 (85.0)**	19 (95.0)

IV.4.2. Variability among participating laboratories

At the qualitative data level, no variability between LAB2, LAB4 and LAB5 could be observed since these participants correctly identified all faecal samples. In contrast, the other participating laboratories misclassified at least 1 aliquot: LAB1, LAB3, LAB8 and LAB10 misclassified 1 aliquot of the strong positive faecal sample PT2012SALBACPF1 (NEG instead of POS), LAB6 misclassified 2 aliquots of the strong positive faecal sample PT2012SALBACPF1 (2x NEG instead of POS) and 1 aliquot of the negative faecal sample PT2012SALBACNF1 (POS instead of NEG), LAB7 misclassified 1 aliquot of the strong positive faecal sample PT2012SALBACPF1 (NEG instead of POS) and 2 aliquots of the weak positive faecal sample PT2012SALBACPF2 (2x NEG instead of POS), and LAB9 misclassified 1 aliquot of the strong positive faecal sample PT2012SALBACPF1 (NEG instead of POS), 1 aliquot of the weak positive faecal sample PT2012SALBACPF2 (NEG instead of POS), and 1 aliquot of the negative faecal sample PT2012SALBACNF1 (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	PT2012SALBACNF1	NEG	NEG	1
2	1	2	PT2012SALBACPF1	POS	POS	1
3	1	3	PT2012SALBACPF1	POS	POS	1
4	1	4	PT2012SALBACNF1	NEG	NEG	1
5	1	5	PT2012SALBACNF1	NEG	NEG	1
6	1	6	PT2012SALBACPF2	POS	POS	1
7	1	7	PT2012SALBACNF1	NEG	NEG	1
8	1	8	PT2012SALBACPF1	**POS**	**NEG**	**0**
9	1	9	PT2012SALBACNF1	NEG	NEG	1
10	1	10	PT2012SALBACPF2	POS	POS	1
11	1	11	PT2012SALBACNF1	NEG	NEG	1
12	1	12	PT2012SALBACPF1	POS	POS	1
13	1	13	PT2012SALBACNF1	NEG	NEG	1
14	1	14	PT2012SALBACNF1	NEG	NEG	1
15	1	15	PT2012SALBACPF1	POS	POS	1
16	1	16	PT2012SALBACNF1	NEG	NEG	1
17	1	17	PT2012SALBACNF1	NEG	NEG	1
18	1	18	PT2012SALBACPF2	POS	POS	1
19	1	19	PT2012SALBACNF1	NEG	NEG	1
20	1	20	PT2012SALBACNF1	NEG	NEG	1
21	2	1	PT2012SALBACNF1	NEG	NEG	1
22	2	2	PT2012SALBACNF1	NEG	NEG	1
23	2	3	PT2012SALBACPF2	POS	POS	1
24	2	4	PT2012SALBACNF1	NEG	NEG	1
25	2	5	PT2012SALBACNF1	NEG	NEG	1
26	2	6	PT2012SALBACNF1	NEG	NEG	1
27	2	7	PT2012SALBACPF1	POS	POS	1
28	2	8	PT2012SALBACPF1	POS	POS	1
29	2	9	PT2012SALBACNF1	NEG	NEG	1
30	2	10	PT2012SALBACNF1	NEG	NEG	1
31	2	11	PT2012SALBACPF2	POS	POS	1
32	2	12	PT2012SALBACNF1	NEG	NEG	1
33	2	13	PT2012SALBACPF1	POS	POS	1
34	2	14	PT2012SALBACNF1	NEG	NEG	1
35	2	15	PT2012SALBACPF2	POS	POS	1
36	2	16	PT2012SALBACNF1	NEG	NEG	1
37	2	17	PT2012SALBACPF1	POS	POS	1
38	2	18	PT2012SALBACNF1	NEG	NEG	1
39	2	19	PT2012SALBACNF1	NEG	NEG	1
40	2	20	PT2012SALBACPF1	POS	POS	1

(Table 3 - CONTINUED)

	LABNR	LABPOSIT	SAMPLE	STATUS	RESULT	SUCCESS
41	3	1	PT2012SALBACNF1	NEG	NEG	1
42	3	2	PT2012SALBACNF1	NEG	NEG	1
43	3	3	PT2012SALBACPF2	POS	POS	1
44	3	4	PT2012SALBACNF1	NEG	NEG	1
45	3	5	PT2012SALBACNF1	NEG	NEG	1
46	3	6	PT2012SALBACNF1	NEG	NEG	1
47	3	7	PT2012SALBACPF1	POS	POS	1
48	3	8	PT2012SALBACPF1	POS	POS	1
49	3	9	PT2012SALBACNF1	NEG	NEG	1
50	3	10	PT2012SALBACNF1	NEG	NEG	1
51	3	11	PT2012SALBACPF2	POS	POS	1
52	3	12	PT2012SALBACNF1	NEG	NEG	1
53	3	13	PT2012SALBACPF1	**POS**	**NEG**	**0**
54	3	14	PT2012SALBACNF1	NEG	NEG	1
55	3	15	PT2012SALBACPF2	POS	POS	1
56	3	16	PT2012SALBACNF1	NEG	NEG	1
57	3	17	PT2012SALBACPF1	POS	POS	1
58	3	18	PT2012SALBACNF1	NEG	NEG	1
59	3	19	PT2012SALBACNF1	NEG	NEG	1
60	3	20	PT2012SALBACPF1	POS	POS	1
61	4	1	PT2012SALBACNF1	NEG	NEG	1
62	4	2	PT2012SALBACPF1	POS	POS	1
63	4	3	PT2012SALBACPF1	POS	POS	1
64	4	4	PT2012SALBACNF1	NEG	NEG	1
65	4	5	PT2012SALBACNF1	NEG	NEG	1
66	4	6	PT2012SALBACPF2	POS	POS	1
67	4	7	PT2012SALBACNF1	NEG	NEG	1
68	4	8	PT2012SALBACPF1	POS	POS	1
69	4	9	PT2012SALBACNF1	NEG	NEG	1
70	4	10	PT2012SALBACPF2	POS	POS	1
71	4	11	PT2012SALBACNF1	NEG	NEG	1
72	4	12	PT2012SALBACPF1	POS	POS	1
73	4	13	PT2012SALBACNF1	NEG	NEG	1
74	4	14	PT2012SALBACNF1	NEG	NEG	1
75	4	15	PT2012SALBACPF1	POS	POS	1
76	4	16	PT2012SALBACNF1	NEG	NEG	1
77	4	17	PT2012SALBACNF1	NEG	NEG	1
78	4	18	PT2012SALBACPF2	POS	POS	1
79	4	19	PT2012SALBACNF1	NEG	NEG	1
80	4	20	PT2012SALBACNF1	NEG	NEG	1

(Table 3 - CONTINUED)

	LABNR	LABPOSIT	SAMPLE	STATUS	RESULT	SUCCESS
81	5	1	PT2012SALBACPF2	POS	POS	1
82	5	2	PT2012SALBACNF1	NEG	NEG	1
83	5	3	PT2012SALBACPF1	POS	POS	1
84	5	4	PT2012SALBACNF1	NEG	NEG	1
85	5	5	PT2012SALBACPF2	POS	POS	1
86	5	6	PT2012SALBACNF1	NEG	NEG	1
87	5	7	PT2012SALBACPF1	POS	POS	1
88	5	8	PT2012SALBACNF1	NEG	NEG	1
89	5	9	PT2012SALBACNF1	NEG	NEG	1
90	5	10	PT2012SALBACPF1	POS	POS	1
91	5	11	PT2012SALBACNF1	NEG	NEG	1
92	5	12	PT2012SALBACNF1	NEG	NEG	1
93	5	13	PT2012SALBACPF2	POS	POS	1
94	5	14	PT2012SALBACNF1	NEG	NEG	1
95	5	15	PT2012SALBACNF1	NEG	NEG	1
96	5	16	PT2012SALBACNF1	NEG	NEG	1
97	5	17	PT2012SALBACPF1	POS	POS	1
98	5	18	PT2012SALBACPF1	POS	POS	1
99	5	19	PT2012SALBACNF1	NEG	NEG	1
100	5	20	PT2012SALBACNF1	NEG	NEG	1
101	6	1	PT2012SALBACNF1	NEG	NEG	1
102	6	2	PT2012SALBACPF1	**POS**	**NEG**	**0**
103	6	3	PT2012SALBACNF1	NEG	NEG	1
104	6	4	PT2012SALBACNF1	NEG	NEG	1
105	6	5	PT2012SALBACPF1	**POS**	**NEG**	**0**
106	6	6	PT2012SALBACNF1	NEG	NEG	1
107	6	7	PT2012SALBACNF1	**NEG**	**POS**	**0**
108	6	8	PT2012SALBACPF2	POS	POS	1
109	6	9	PT2012SALBACNF1	NEG	NEG	1
110	6	10	PT2012SALBACNF1	NEG	NEG	1
111	6	11	PT2012SALBACNF1	NEG	NEG	1
112	6	12	PT2012SALBACPF1	POS	POS	1
113	6	13	PT2012SALBACPF1	POS	POS	1
114	6	14	PT2012SALBACNF1	NEG	NEG	1
115	6	15	PT2012SALBACNF1	NEG	NEG	1
116	6	16	PT2012SALBACPF2	POS	POS	1
117	6	17	PT2012SALBACNF1	NEG	NEG	1
118	6	18	PT2012SALBACPF1	POS	POS	1
119	6	19	PT2012SALBACNF1	NEG	NEG	1
120	6	20	PT2012SALBACPF2	POS	POS	1

(Table 3 - CONTINUED)

	LABNR	LABPOSIT	SAMPLE	STATUS	RESULT	SUCCESS
121	7	1	PT2012SALBACNF1	NEG	NEG	1
122	7	2	PT2012SALBACPF1	**POS**	**NEG**	**0**
123	7	3	PT2012SALBACNF1	NEG	NEG	1
124	7	4	PT2012SALBACNF1	NEG	NEG	1
125	7	5	PT2012SALBACPF1	POS	POS	1
126	7	6	PT2012SALBACNF1	NEG	NEG	1
127	7	7	PT2012SALBACNF1	NEG	NEG	1
128	7	8	PT2012SALBACPF2	POS	POS	1
129	7	9	PT2012SALBACNF1	NEG	NEG	1
130	7	10	PT2012SALBACNF1	NEG	NEG	1
131	7	11	PT2012SALBACNF1	NEG	NEG	1
132	7	12	PT2012SALBACPF1	POS	POS	1
133	7	13	PT2012SALBACPF1	POS	POS	1
134	7	14	PT2012SALBACNF1	NEG	NEG	1
135	7	15	PT2012SALBACNF1	NEG	NEG	1
136	7	16	PT2012SALBACPF2	**POS**	**NEG**	**0**
137	7	17	PT2012SALBACNF1	NEG	NEG	1
138	7	18	PT2012SALBACPF1	POS	POS	1
139	7	19	PT2012SALBACNF1	NEG	NEG	1
140	7	20	PT2012SALBACPF2	**POS**	**NEG**	**0**
141	8	1	PT2012SALBACPF2	POS	POS	1
142	8	2	PT2012SALBACNF1	NEG	NEG	1
143	8	3	PT2012SALBACPF1	POS	POS	1
144	8	4	PT2012SALBACNF1	NEG	NEG	1
145	8	5	PT2012SALBACPF2	POS	POS	1
146	8	6	PT2012SALBACNF1	NEG	NEG	1
147	8	7	PT2012SALBACPF1	POS	POS	1
148	8	8	PT2012SALBACNF1	NEG	NEG	1
149	8	9	PT2012SALBACNF1	NEG	NEG	1
150	8	10	PT2012SALBACPF1	**POS**	**NEG**	**0**
151	8	11	PT2012SALBACNF1	NEG	NEG	1
152	8	12	PT2012SALBACNF1	NEG	NEG	1
153	8	13	PT2012SALBACPF2	POS	POS	1
154	8	14	PT2012SALBACNF1	NEG	NEG	1
155	8	15	PT2012SALBACNF1	NEG	NEG	1
156	8	16	PT2012SALBACNF1	NEG	NEG	1
157	8	17	PT2012SALBACPF1	POS	POS	1
158	8	18	PT2012SALBACPF1	POS	POS	1
159	8	19	PT2012SALBACNF1	NEG	NEG	1
160	8	20	PT2012SALBACNF1	NEG	NEG	1

(Table 3 - CONTINUED)

	LABNR	LABPOSIT	SAMPLE	STATUS	RESULT	SUCCESS
161	9	1	PT2012SALBACNF1	NEG	NEG	1
162	9	2	PT2012SALBACPF1	POS	POS	1
163	9	3	PT2012SALBACPF1	POS	POS	1
164	9	4	PT2012SALBACNF1	NEG	NEG	1
165	9	5	PT2012SALBACNF1	NEG	NEG	1
166	9	6	PT2012SALBACPF2	POS	POS	1
167	9	7	PT2012SALBACNF1	NEG	NEG	1
168	9	8	PT2012SALBACPF1	POS	POS	1
169	9	9	PT2012SALBACNF1	NEG	NEG	1
170	9	10	PT2012SALBACPF2	**POS**	**NEG**	**0**
171	9	11	PT2012SALBACNF1	NEG	NEG	1
172	9	12	PT2012SALBACPF1	**POS**	**NEG**	**0**
173	9	13	PT2012SALBACNF1	NEG	NEG	1
174	9	14	PT2012SALBACNF1	**NEG**	**POS**	**0**
175	9	15	PT2012SALBACPF1	POS	POS	1
176	9	16	PT2012SALBACNF1	NEG	NEG	1
177	9	17	PT2012SALBACNF1	NEG	NEG	1
178	9	18	PT2012SALBACPF2	POS	POS	1
179	9	19	PT2012SALBACNF1	NEG	NEG	1
180	9	20	PT2012SALBACNF1	NEG	NEG	1
181	10	1	PT2012SALBACNF1	NEG	NEG	1
182	10	2	PT2012SALBACNF1	NEG	NEG	1
183	10	3	PT2012SALBACPF2	POS	POS	1
184	10	4	PT2012SALBACNF1	NEG	NEG	1
185	10	5	PT2012SALBACNF1	NEG	NEG	1
186	10	6	PT2012SALBACNF1	NEG	NEG	1
187	10	7	PT2012SALBACPF1	POS	POS	1
188	10	8	PT2012SALBACPF1	POS	POS	1
189	10	9	PT2012SALBACNF1	NEG	NEG	1
190	10	10	PT2012SALBACNF1	NEG	NEG	1
191	10	11	PT2012SALBACPF2	POS	POS	1
192	10	12	PT2012SALBACNF1	NEG	NEG	1
193	10	13	PT2012SALBACPF1	POS	POS	1
194	10	14	PT2012SALBACNF1	NEG	NEG	1
195	10	15	PT2012SALBACPF2	POS	POS	1
196	10	16	PT2012SALBACNF1	NEG	NEG	1
197	10	17	PT2012SALBACPF1	**POS**	**NEG**	**0**
198	10	18	PT2012SALBACNF1	NEG	NEG	1
199	10	19	PT2012SALBACNF1	NEG	NEG	1
200	10	20	PT2012SALBACPF1	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.

Only 3 out of 10 participating laboratories correctly identified all faecal samples (100% of agreement): LAB2, LAB4 and LAB5. In contrast, LAB1, LAB3, LAB8 and LAB10 misclassified 1 aliquot of the strong positive faecal sample (95% of agreement), whereas LAB6, LAB7 and LAB9 misclassified 3 aliquots of different faecal samples (85% of agreement). Indeed, LAB6 misclassified 2 aliquots of the strong positive faecal sample and 1 aliquot of the negative faecal sample, LAB7 misclassified 1 aliquot of the strong positive faecal sample and 2 aliquots of the weak positive faecal sample, LAB9 misclassified 1 aliquot of the strong positive faecal sample, 1 aliquot of the weak positive faecal sample and 1 aliquot of the negative faecal sample (Table 2 and Table 3). In total, 11 false-negative results and 2 false-positive results were reported by 7 participating laboratories. Surprisingly, 8 out of 11 false-negative results were due to misclassification of the strong positive faecal sample, whereas only 3 out of 11 false-negative results were due to misclassification of the weak positive faecal sample. This may be due to inappropriate homogenisation of the faecal samples since the volume of inoculum was smaller for the strong positive faecal samples compared to the weak positive faecal samples (21µl and 137µl of the corresponding bacterial dilution, respectively). LAB9 informed the PT provider that they were not sure about the correct order of the results corresponding with the faecal samples 9 to 15, which may (partially) explain their insufficient performance for this PT.

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, 7 out of 10 participants achieved a satisfactory performance for the isolation of *Salmonella* sp. from faeces. Hereby, LAB6, LAB7 and LAB9 did not reach the required 90% of agreement.

Head CVD-ERA
Yves Van der Stede

Appendix

Name of the participating laboratories

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

Dierengezondheidszorg Vlaanderen (DGZ) (Torhout, Belgium)

FLVVM (Melle, Belgium)

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

Lavetan NV (Turnhout, Belgium)

LFSAGx (Gembloux, Belgium)

MicroBioMetrix bvba (Sint-Katelijne-Waver, Belgium)

Plukon Food Laboratory (Wezep, The Netherlands)

Servaco Food Control NV (Wetteren, Belgium)

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