

## Supplemental Material

### 1. *Salmonella* serovars in the world

**Table S1a** Matrices contributions (loadings) to Factors construction for serovars in the world

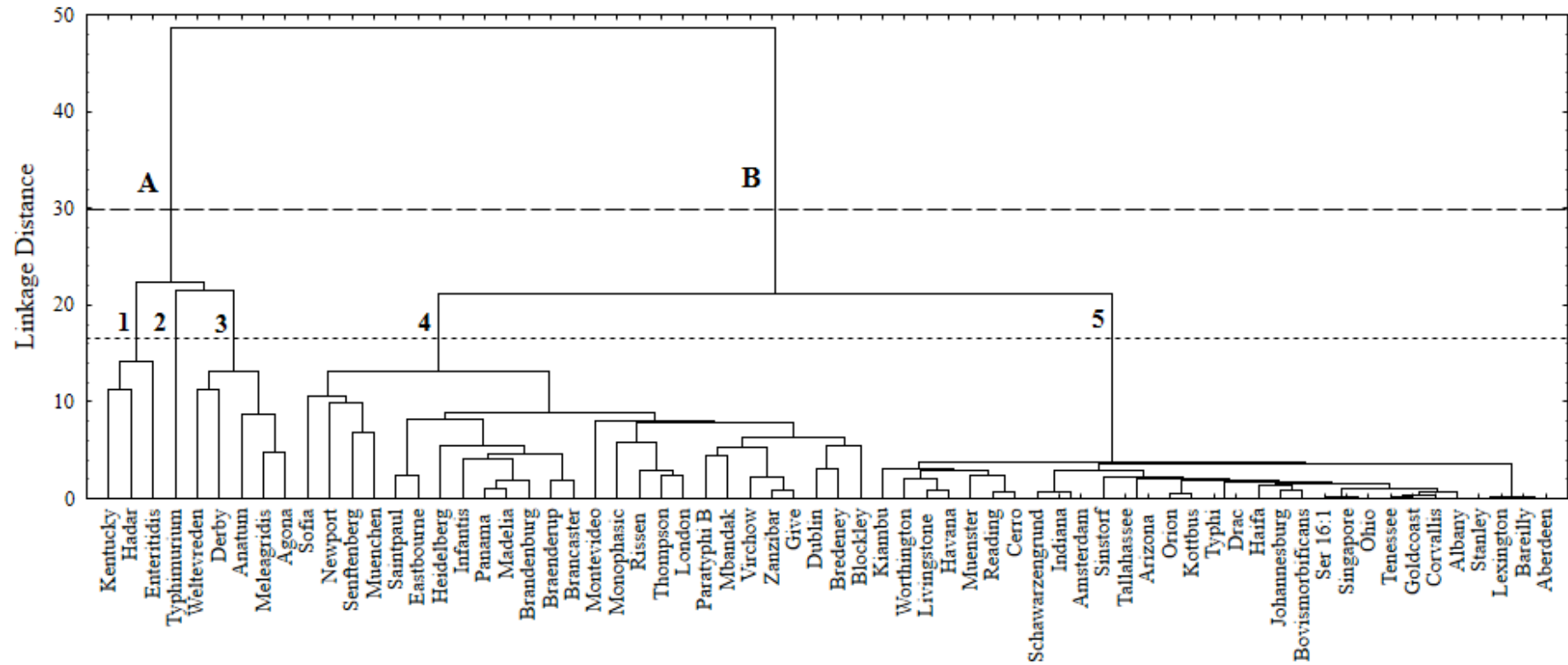
Matrixes and continents	Factor 1 (33.37%)	Factor 2 (24.21%)	Factor 3 (12.61%)
Pork (AF)	0.01	0.06	0.03
Beef (AF)	0.04	0.06	0.01
Poultry (AF)	0.00	0.17*	0.00
Seafood (AF)	0.04	0.11*	0.00
Pork (LA)	0.05	0.02	0.08
Beef (LA)	0.06	0.01	0.14*
Poultry (LA)	0.01	0.07*	0.03
Seafood (LA)	0.02	0.02	0.03
Pork (NA)	0.10*	0.00	0.00
Beef (NA)	0.01	0.00	0.19*
Poultry (NA)	0.00	0.03	0.01
Seafood (NA)	0.01	0.02	0.15*
Pork (AS)	0.04	0.00	0.01
Beef (AS)	0.01	0.07	0.04
Poultry (AS)	0.02	0.08*	0.01
Seafood (AS)	0.00	0.02	0.17*
Pork (EU)	0.10*	0.03	0.01
Beef (EU)	0.09*	0.03	0.01
Poultry (EU)	0.01	0.10*	0.02
Seafood (EU)	0.09*	0.03	0.02
Pork (OC)	0.10*	0.03	0.01
Beef (OC)	0.08	0.01	0.04

\*The most important matrices for each factor construction. AF: Africa, LA: Latin America, NA: North America, AS: Asia, EU: Europe, OC: Oceania

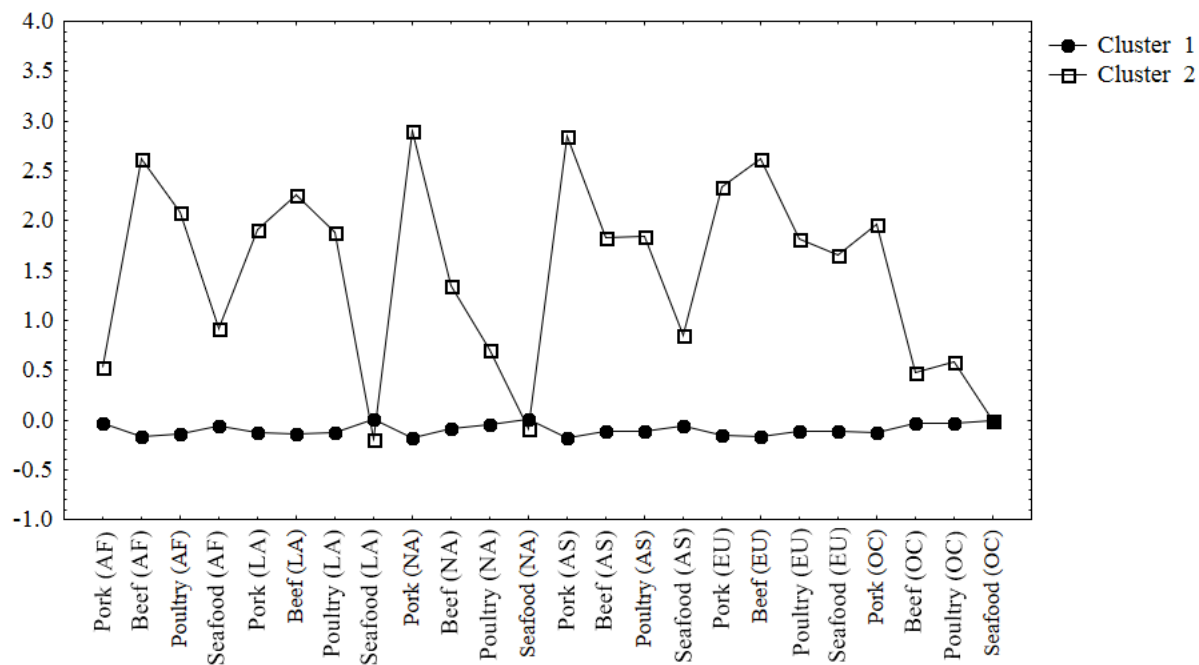
**Table S1b** Serovars contributions (loadings) to factors construction for matrices in the world

Serovars	Factor 1 (33.37%)	Factor 2 (24.21%)	Factor 3 (12.61%)
Agona	0.06	7.30	0.62
Anatum	4.11	4.75	37.84*
Derby	2.41	4.28	3.91
Enteritidis	10.07	24.09*	7.40
Hadar	16.66	11.94	4.01
Kentucky	6.17	1.46	3.67
Meleagridis	0.41	8.52	6.55
Typhimurium	58.86*	20.12*	1.65
Weltevreden	1.26	17.54	34.35*

\*The most important serovars for each factor construction

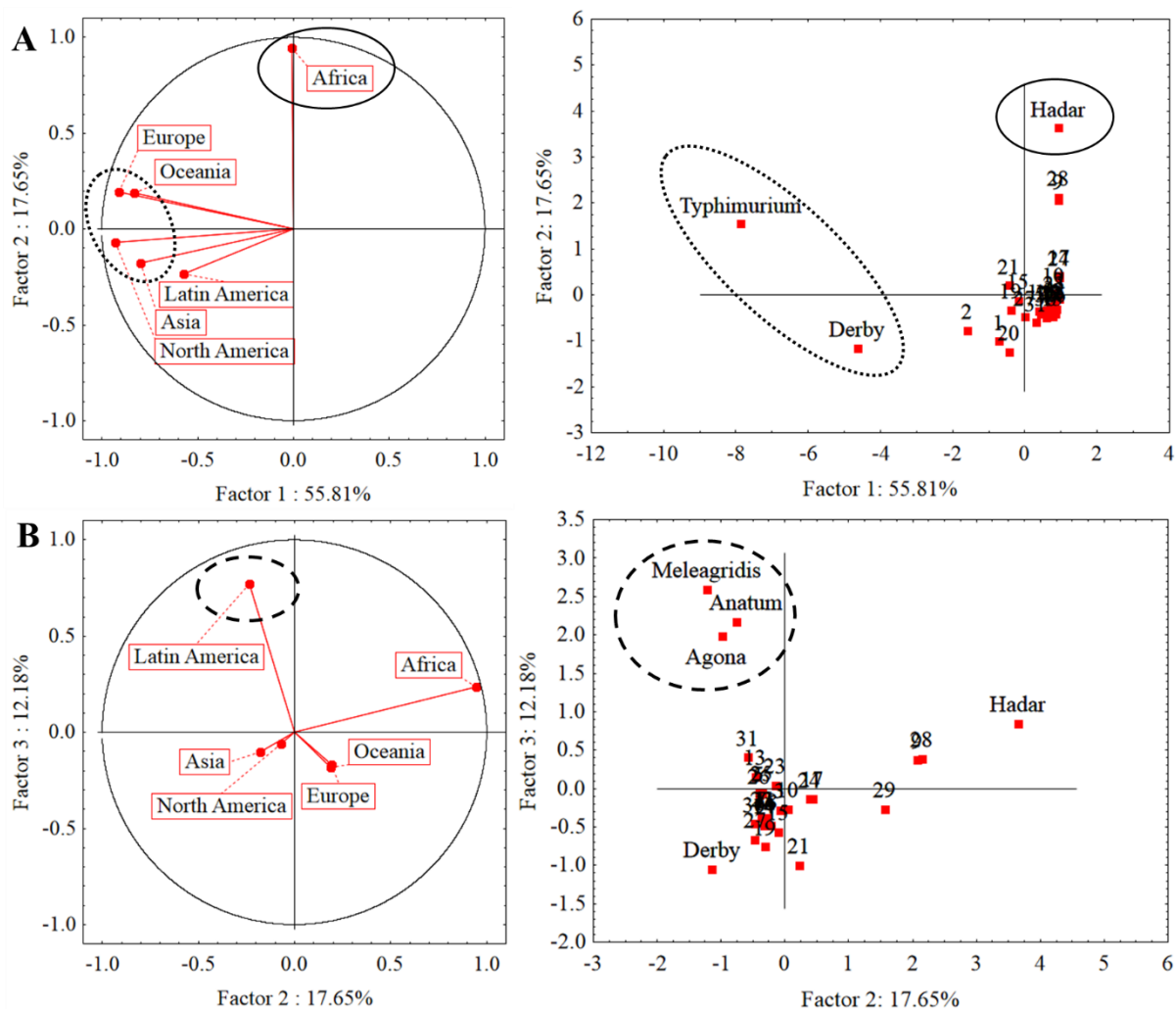


**FIG S1** Cluster analysis of all serovars in the world



**FIG S2** Prevalence means (Standardized data) for each cluster. AF: Africa, LA: Latin America, NA: North America, AS: Asia, EU: Europe, OC: Oceania

## 2. Pork



**FIG S3** Principal Components Analysis (PCA) of *Salmonella* serovars in pork

**Table S2a** Serovars contributions (loadings) to Factors construction for pork in the world

Serovars	Factor 1 (55.81 %)	Factor 2 (17.65 %)	Factor 3 (12.18 %)
Agona	0.53	3.11	18.01*
Anatum	2.57	1.82	21.67*
Blockley	0.86	0.02	0.34
Bovismorbificans	0.46	0.17	1.01
Brandenburg	0.17	0.51	0.02
Bredeney	0.71	0.29	0.69
Corvallis	0.69	0.44	0.66
Derby	21.57*	4.14	4.97
Eastbourne	0.84	13.46	0.64
Enteritidis	0.61	0.00	0.32
Goldcoast	0.74	0.30	0.66
Hadar	0.82	41.90*	3.31
Havana	0.57	0.68	0.11
Heidelberg	0.14	0.36	1.03
Infantis	0.04	0.04	1.42
Johannesburg	0.35	0.33	0.87

Kentucky	0.86	0.56	0.07
Livingstone	0.65	0.26	0.74
London	0.16	0.31	2.58
Meleagridis	0.20	4.73	30.91*
Monophasic	0.21	0.15	4.47
Muenster	0.57	0.41	0.65
Muenchen	0.67	0.07	0.01
Newport	0.86	0.48	0.08
Panama	0.38	0.41	0.01
Reading	0.70	0.51	0.03
Rissen	0.00	0.71	1.98
Saintpaul	0.84	14.33	0.71
Typhimurium	61.83*	7.68	0.31
Weltevreden	0.33	0.71	0.93
Worthington	0.08	1.09	0.78

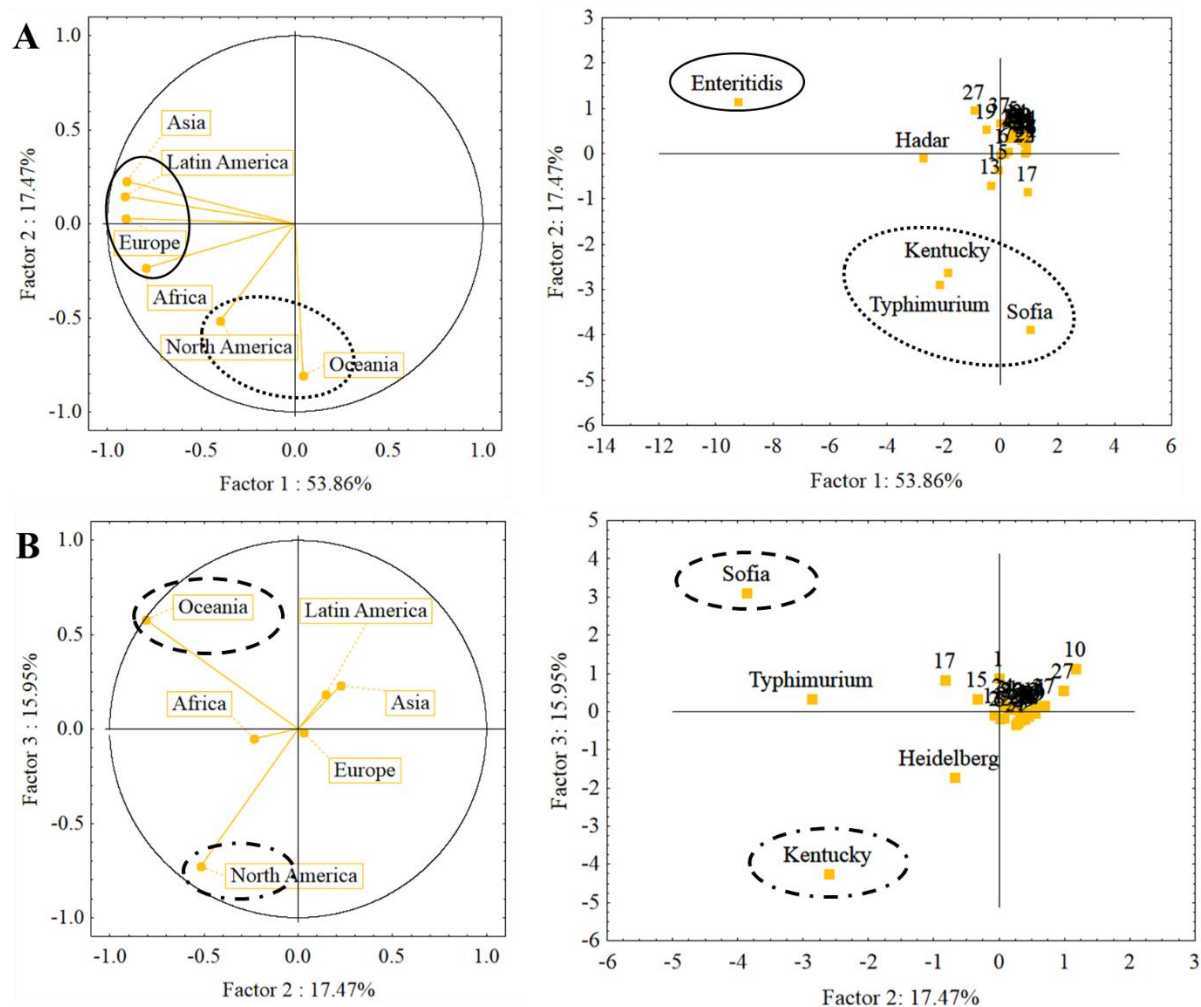
\*The most important serovars for each Factor construction.

**Table S2b** Continents contributions (loadings) to Factors construction for pork in the world

Continents	Factor 1 (55.81 %)	Factor 2 (17.65 %)	Factor 3 (12.18 %)
Africa	0.00	0.85*	0.08
Latin America	0.10	0.05	0.82*
North America	0.26*	0.00	0.01
Asia	0.19*	0.03	0.01
Europe	0.25*	0.03	0.04
Oceania	0.21*	0.03	0.04

\*The most important continent for each Factor construction.

### 3. Poultry



**FIG S4** Principal Components Analysis (PCA) of *Salmonella* serovars in poultry

**Table S3a** Serovars contributions (loadings) to Factors construction for poultry in the world

Serovars	Factor 1 (53.86 %)	Factor 2 (17.47 %)	Factor 3 (15.95 %)
Agona	0.00	0.00	2.35
Albany	0.43	0.55	0.00
Amsterdam	0.30	0.76	0.01
Anatum	0.05	0.31	0.00
Blockley	0.16	0.98	0.06
Braenderup	0.01	0.00	0.09
Brancaster	0.05	0.01	0.08
Bredeney	0.22	0.48	0.03
Derby	0.63	0.28	0.11
Enteritidis	73.57*	3.60	3.77
Hadar	6.51	0.02	0.02
Havana	0.14	0.50	0.03
Heidelberg	0.11	1.25	8.57
Indiana	0.28	0.79	0.02
Infantis	0.01	0.31	0.33
Kentucky	3.01	18.17*	51.88*
Kiambu	0.74	1.86	2.10

Livingstone	0.20	0.48	0.03
Mbandaka	0.24	0.79	0.00
Meleagridis	0.46	0.54	0.00
Monophasic	0.58	0.16	0.29
Montevideo	0.59	0.00	0.06
Muenster	0.42	0.25	0.03
Muenchen	0.70	0.01	0.09
Newport	0.48	0.29	0.03
Ohio	0.69	0.10	0.02
Paratyphi B	0.76	2.49	0.95
Saintpaul	0.46	0.28	0.03
Schwarzengrund	0.15	0.40	0.09
Senftenberg	0.39	0.58	0.00
Ser 16:1	0.70	0.05	0.04
Singapore	0.69	0.11	0.01
Sofia	0.88	39.73*	28.24*
Tennessee	0.68	0.40	0.01
Thompson	0.60	0.20	0.21
Typhimurium	4.09	22.01*	0.34
Virchow	0.00	1.23	0.10

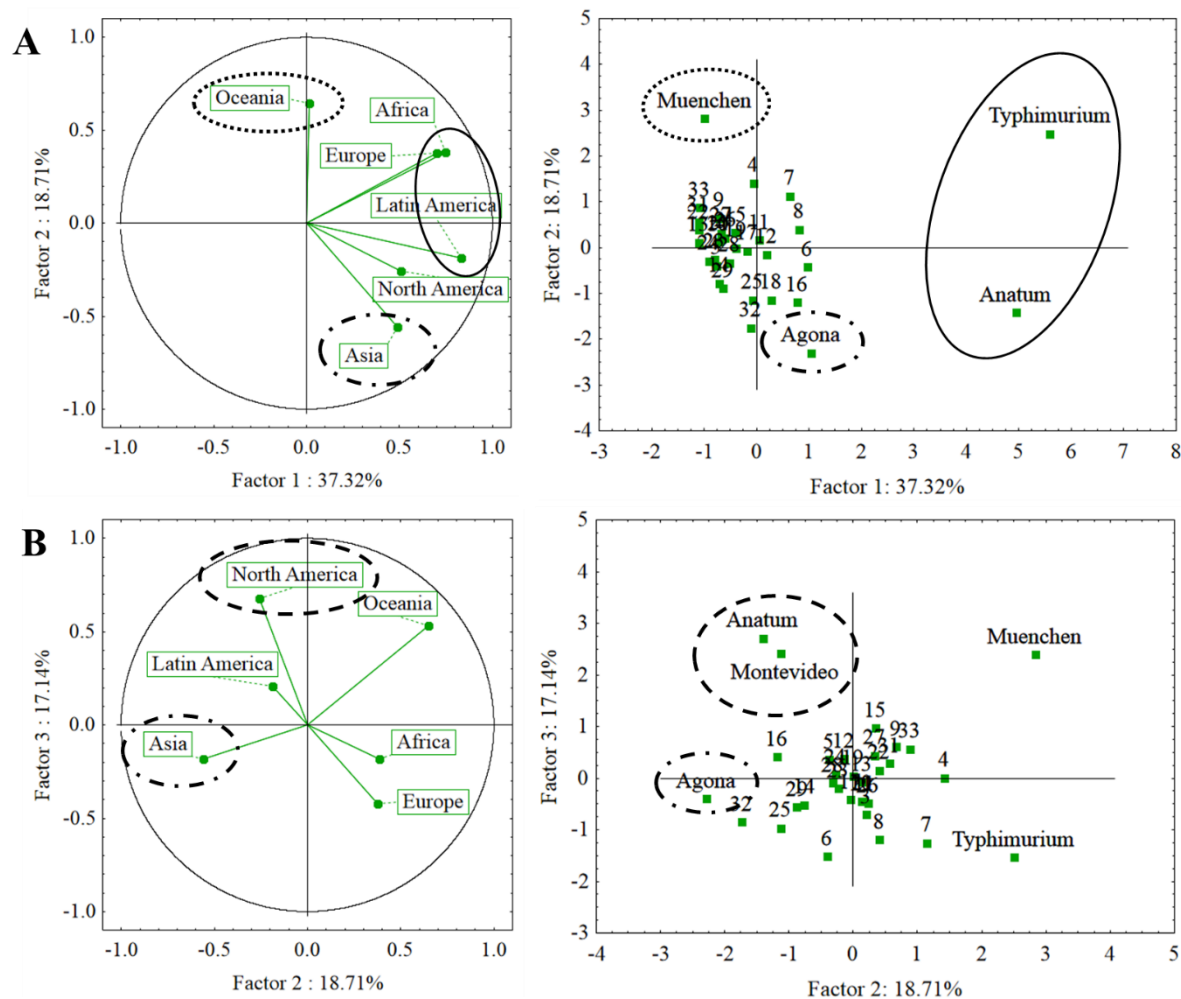
\*The most important serovars for each Factor construction.

**Table S3b** Continents contributions (loadings) to Factors construction for poultry in the world

Continents	Factor 1 (53.86 %)	Factor 2 (17.47 %)	Factor 3 (15.95 %)
Africa	0.19*	0.05	0.00
Latin America	0.25*	0.02	0.04
North America	0.05	0.25*	0.56*
Asia	0.25*	0.05	0.06
Europe	0.25*	0.00	0.00
Oceania	0.00	0.62*	0.35*

\*The most important continent for each Factor construction.

## 4. Beef



**FIG S5** Principal Components Analysis (PCA) of *Salmonella* serovars in beef

**Table S4a** Serovars contributions (loadings) to Factors construction for beef in the world

Serovars	Factor 1 (37.32 %)	Factor 2 (18.71 %)	Factor 3 (17.14 %)
Agona	1.47	14.65*	0.45
Anatum	34.03*	5.54	22.45*
Brandenburg	0.62	0.10	1.47
Bredeney	0.01	5.58	0.00
Cerro	0.83	0.42	0.42
Derby	1.27	0.49	6.90
Dublin	0.55	3.61	4.72
Enteritidis	0.89	0.46	4.26
Give	0.73	1.19	1.17
Haifa	0.75	0.05	0.58
Infantis	0.00	0.08	0.60
Kentucky	0.04	0.06	0.44
Kottbus	1.71	0.04	0.01
London	0.73	1.63	0.79
Mbandaka	0.23	0.31	2.91
Meleagridis	0.83	3.93	0.53
Monophasic	0.05	0.01	0.50
Montevideo	0.11	3.59	17.92*



Muenster	0.22	0.00	0.01
Muenchen	1.39	22.19*	17.59
Newport	0.73	0.05	0.59
Orion	1.70	0.43	0.08
Panama	0.91	0.16	0.11
Reading	1.17	0.22	0.02
Rissen	0.01	3.59	2.78
Saintpaul	0.51	0.14	0.71
Senftenberg	0.65	0.29	0.60
Sinstorf	0.39	0.30	0.02
Thompson	0.59	2.17	0.92
Typhimurium	43.49*	17.29*	7.05
Virchow	1.69	0.86	0.27
Weltevreden	0.02	8.41	2.14
Zanzibar	1.67	2.15	1.01

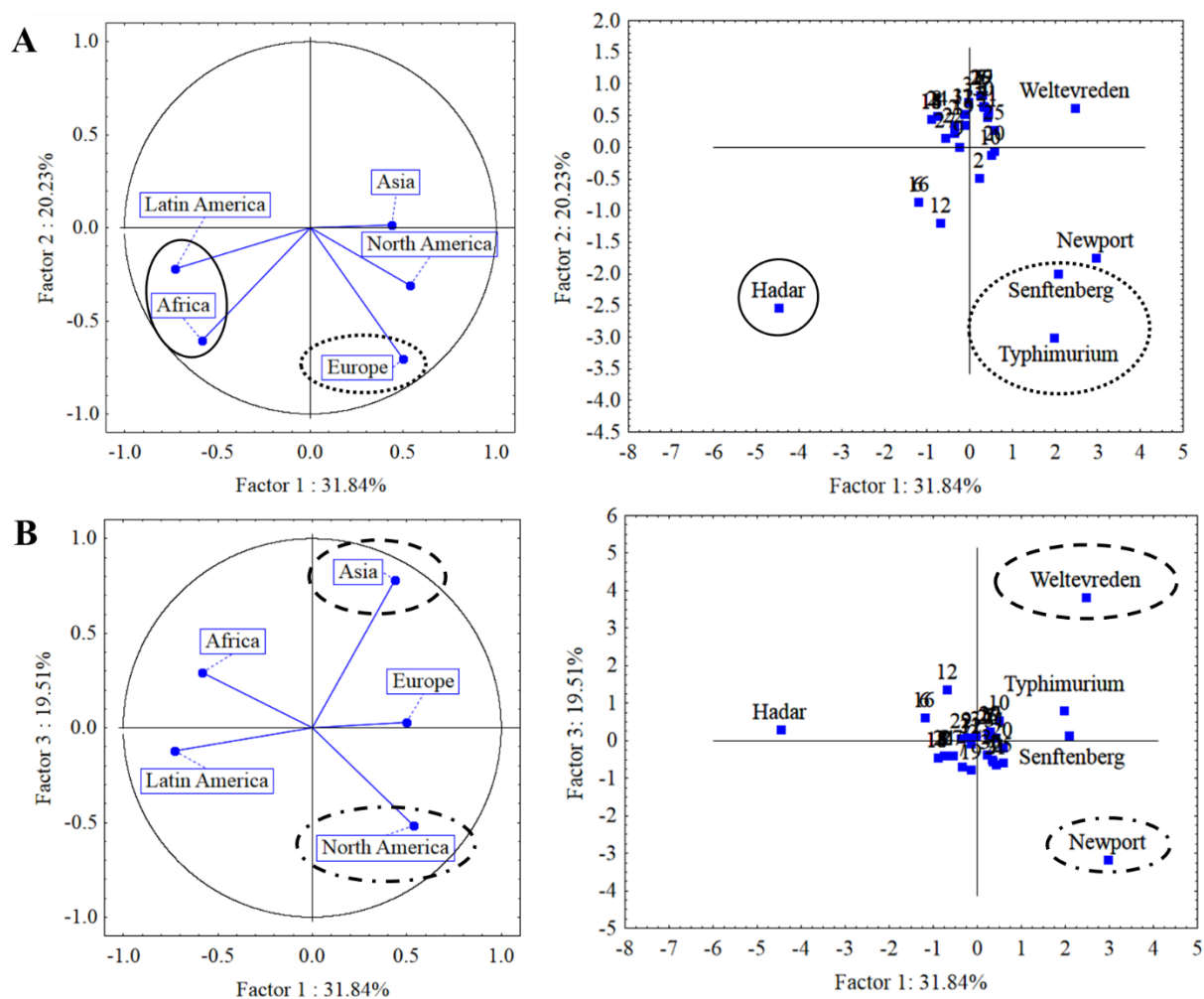
\*The most important serovars for each Factor construction.

**Table S4b** Continents contributions (loadings) to Factors construction for beef in the world

Continents	Factor 1 (37.32 %)	Factor 2 (18.71 %)	Factor 3 (17.14 %)
Africa	0.25*	0.13	0.03
Latin America	0.31*	0.03	0.04
North America	0.12	0.06	0.45*
Asia	0.11	0.28*	0.03
Europe	0.22*	0.13	0.18
Oceania	0.00	0.37*	0.27*

\*The most important continent for each Factor construction.

## 5. Seafood



**FIG S6** Principal Components Analysis (PCA) of *Salmonella* serovars in seafood

**Table S5a** Serovars contributions (loadings) to Factors construction for seafood in the world

Serovars	Factor 1 (31.84 %)	Factor 2 (20.23 %)	Factor 3 (19.51 %)
Aberdeen	0.11	2.09	0.09
Agona	0.07	0.69	0.37
Anatum	0.00	1.59	0.04
Arizona	0.21	1.22	0.86
Bareilly	0.13	2.10	0.14
Blockley	2.80	2.16	1.21
Braenderup	0.26	0.41	1.43
Brandenburg	1.13	0.76	0.47
Bredeney	0.13	0.00	0.03
Derby	0.43	0.04	0.99
Drac	0.04	0.85	0.01
Enteritidis	0.92	4.18	5.92
Hadar	38.33*	19.06*	0.29
Heidelberg	1.59	0.61	0.54
Infantis	1.59	0.61	0.54
Kentucky	2.80	2.16	1.21
Lexington	0.15	2.10	0.21

Madelia	1.59	0.61	0.54
Mbandaka	0.04	0.40	1.72
Monophasic	0.61	0.01	0.09
Muenchen	0.33	1.01	1.21
Muenster	0.28	0.17	0.02
Newport	16.52	8.99	30.99*
Panama	1.13	0.76	0.47
Paratyphi B	0.61	0.25	1.03
Rissen	0.12	2.10	0.11
Saintpaul	0.64	0.08	0.43
Senftenberg	8.12	11.82*	0.08
Stanley	0.15	2.10	0.23
Tallahassee	0.18	1.29	0.76
Thompson	0.30	0.72	0.03
Typhi	0.04	0.85	0.01
Typhimurium	7.25	27.06*	2.14
Weltevreden	11.40	1.17	45.76*

\*The most important serovars for each Factor construction.

**Table S5b** Continents contributions (loadings) to Factors construction for seafood in the world

Continents	Factor 1 (31.84 %)	Factor 2 (20.23 %)	Factor 3 (19.51 %)
Africa	0.21*	0.36*	0.09
Latin America	0.33*	0.05	0.02
North America	0.18	0.10	0.27*
Asia	0.12	0.00	0.62*
Europe	0.16	0.49*	0.00

\*The most important continent for each Factor construction.

**TABLE S6 - Reported Serovars - Poultry**

Continent	TS	PS	PR	Continent	TS	PS	PR	Continent	TS	PS	PR
Latin America	9,890	1,851	18.72	North America	151,575	17,475	11.53	Africa	7,621	1,432	18.79
Serotypes		PS	PR	Serotypes		PS	PR	Serotypes		PS	PR
Enteritidis <sup>1-15</sup>		752	7.60	Kentucky <sup>24-38, 45</sup>		5,897	3.89	Enteritidis <sup>46-65</sup>		242	3.18
Paratyphi B <sup>2,16-18</sup>		249	2.52	Heidelberg <sup>25-27,29-42,45</sup>		2,774	1.83	Hadar <sup>48-50,57,60-62,65-71</sup>		235	3.08
Heidelberg <sup>8,9,13,14,16-19</sup>		192	1.94	Typhimurium <sup>27-36,38,40,43,45</sup>		1,779	1.17	Typhimurium <sup>*</sup>		212	2.78
Typhimurium <sup>5,6,8-11,14,17,19,20</sup>		113	1.14	Enteritidis <sup>24,25,27,29,31,33,35,38,44,45</sup>		1,239	0.82	Braenderup <sup>65,66,69,72</sup>		116	1.52
Agona <sup>1,5-8,14,21</sup>		116	1.17	Hadar <sup>24,25,27,29-31,33,35,38-41,43,45</sup>		719	0.47	Brancaster <sup>50,57,67,68</sup>		100	1.31
Hadar <sup>5,10,11,13,14</sup>		100	1.01	Schwarzengrund <sup>27,30,31,35,37,38,45</sup>		408	0.27	Kentucky <sup>48,50,54,55,57-59,62,68,69,71,73</sup>		101	1.33
Infantis <sup>1,5,8,9,11,12,15,21</sup>		95	0.96	Monophasic <sup>27,31,33,37,41,45</sup>		344	0.23	Anatum <sup>54,55,65,66,69,72</sup>		55	0.72
Mbandaka <sup>1,8,9,11,15,19</sup>		60	0.61	Montevideo <sup>24,27,30,31,33,38,39,43,45</sup>		338	0.22	Infants <sup>51,59,61,62,65,66</sup>		44	0.58
Senftenberg <sup>5,8,15,19</sup>		56	0.57	Thompson <sup>24,27,29-31,33,37,38,45</sup>		278	0.18	Muenster <sup>49,55,57,71,73</sup>		29	0.38
Albany <sup>5,7,11,19,20</sup>		41	0.41	Infantis <sup>25,27,30,31,33,38,45</sup>		199	0.13	Saintpaul <sup>46,47,49,62,65,71,72</sup>		24	0.31
Meleagridis <sup>6,7</sup>		43	0.43	Derby <sup>29,39,43,45</sup>		172	0.11	Newport <sup>63,69,75</sup>		22	0.29
Others <sup>1-23</sup>		508	5.14	Others <sup>24-45</sup>		2,494	1.65	Others <sup>46-77</sup>		397	5.21
Continent	TS	PS	PR	Continent	TS	PS	PR	Continent	TS	PS	PR
Asia	35,296	22,677	64.25	Europe	28,377	2,346	8.27	Oceania	15,809	9,490	60
Serotypes		PS	PR	Serotypes		PS	PR	Serotypes		PS	PR
Enteritidis <sup>78-114</sup>		4,436	12.57	Enteritidis <sup>132-145</sup>		578	2.04	Sofia <sup>148-150</sup>		3,398	21.49
Hadar <sup>†</sup>		1,907	5.40	Mbandaka <sup>133,137-139,141,145</sup>		246	0.87	Typhimurium <sup>148,150,151</sup>		1,616	10.22
Paratyphi B <sup>92,98,111,115,116</sup>		1,051	2.98	Kentucky <sup>132,139,141,145</sup>		191	0.67	Kiambu <sup>148-150</sup>		988	6.25
Virchow <sup>79,93,94,97,100,106,107,112,115-120</sup>		949	2.69	Typhimurium <sup>132-135,139-143,145,146</sup>		132	0.47	Agona <sup>148,150,151</sup>		609	3.85
Agona <sup>‡</sup>		801	2.27	Havana <sup>139</sup>		105	0.37	Infantis <sup>148,150,151</sup>		498	3.15
Blockley <sup>78,79,84,86,98,115,119,123</sup>		755	2.14	Livingstone <sup>138,139,141,142</sup>		87	0.31	Muenchen <sup>150</sup>		273	1.73
Schwarzengrund <sup>78,79,98,100,105,115,116,122,124</sup>		638	1.81	Hadar <sup>133,136,137,139-142,145</sup>		85	0.30	Ser 16:1 <sup>149,150</sup>		211	1.33
Indiana <sup>78,79,83,89,93,94,98,99,109,121,122,125</sup>		521	1.48	Bredeney <sup>140-142,145</sup>		83	0.29	Montevideo <sup>151</sup>		181	1.14
Amsterdam <sup>100,115,116</sup>		483	1.37	Virchow <sup>132,133,137,139,141-143,145,146</sup>		74	0.26	Ohio <sup>150</sup>		166	1.05
Typhimurium <sup>*</sup>		474	1.34	Infantis <sup>132-135,139-142,145,146</sup>		69	0.24	Singapore <sup>148,150</sup>		157	0.99
Anatum <sup>78-80,84,90,100,104,105,112,115,119,123</sup>		470	1.33	Paratyphi B <sup>137,141,142,146</sup>		51	0.18	Tennessee <sup>148</sup>		12	0.13
Others <sup>78-132</sup>		7,014	19.87	Others <sup>134-147</sup>		652	2.30	Others <sup>148-151</sup>		56	0.35

TS: total samples; PS: positive samples; PR: percentage ratio;

\*47,51,52,54,55,66,71-74,56,62-65,69,75; †78,79,81,83,84,86,88,92,94,98,102,104,106,109,113,115-120; ‡78,79,83,86-88,92,100,103,107,109-112,114,115,118,121,122; \*76,78,79,81,85,88,90,91,93,94,97,98,101,102,104-106,109,110,114,117-119,121,126-128

**TABLE S7 Reported Serovars - Pork**

Continent	TS	PS	PR	Continent	TS	PS	PR	Continent	TS	PS	PR
Latin America	3,648	1,460	40.02	North America	14,133	4,882	34.54	Africa	1,863	327	17.55
Serotypes		PS	PR	Serotypes		PS	PR	Serotypes		PS	PR
Meleagridis <sup>6,7,152</sup>		227	6.22	Typhimurium <sup>27-30,157-162</sup>		1,199	8.48	Hadar <sup>165,166</sup>		121	6.49
Anatum <sup>3,6,153</sup>		204	5.59	Derby <sup>27-30,157-159,161-163</sup>		1,098	7.77	Saintpaul <sup>69,166</sup>		75	4.03
Agona <sup>6,152-154</sup>		189	5.18	Anatum <sup>27,30,157,158,161</sup>		509	3.60	Eastbourne <sup>166,167</sup>		73	3.92
Typhimurium <sup>6,23,153-156</sup>		181	4.96	Infantis <sup>27,30,157,158,161-163</sup>		416	2.94	Typhimurium <sup>165,166</sup>		38	2.04
Worthington <sup>152-154</sup>		61	1.67	London <sup>27,30,158,160,161</sup>		293	2.07	Kentucky <sup>166</sup>		23	1.23
Derby <sup>23,152-156</sup>		53	1.45	Agona <sup>28,30,157,161,162</sup>		280	1.98	Newport <sup>165,166</sup>		22	1.18
Havana <sup>153</sup>		38	1.04	Heidelberg <sup>28,30,33,161,162</sup>		256	1.81	Anatum <sup>46,69,165,166</sup>		16	0.86
Brandenburg <sup>23,154,156</sup>		29	0.79	Worthington <sup>157,160-162</sup>		177	1.25	Enteritidis <sup>165,166</sup>		13	0.70
Panama <sup>154,156</sup>		28	0.77	Johannesburg <sup>27,30,33,158,161,163</sup>		156	1.10	Blockley <sup>165</sup>		8	0.43
Muenchen <sup>6,156</sup>		24	0.66	Brandenburg <sup>27,161-163</sup>		143	1.01	Muenchen <sup>46,166</sup>		8	0.43
Reading <sup>6</sup>		20	0.55	Muenster <sup>158,161</sup>		138	0.98	Infantis <sup>69,166,168</sup>		7	0.38
Others <sup>3,6,23,152-156</sup>		754	20.67	Others <sup>27-30,33,157-160,162-164</sup>		911	6.25	Others <sup>46,69,165-168</sup>		143	7.68
Continent	TS	PS	PR	Continent	TS	PS	PR	Continent	TS	PS	RP
Asia	6,347	2,030	31.98	Europe	67,135	6,830	10.17	Oceania	7,423	517	7
Serotypes		PS	PR	Serotypes		PS	PR	Serotypes		PS	PR
Derby <sup>79,80,83,84,87,93,98,105,110,119-122,169-173</sup>		519	8.18	Typhimurium <sup>132,133,139-143,147,176-195</sup>		4,437	6.61	Typhimurium <sup>150,198,199</sup>		151	2.03
Typhimurium <sup>*</sup>		253	3.99	Derby <sup>140-143,176-180,182,183,185-197</sup>		1,365	2.03	Monophasic <sup>150</sup>		80	1.08
Rissen <sup>84,100,103,105,110,112,122,128,169,171-173,175</sup>		155	2.44	Rissen <sup>139,141,179,180,183,186-188,191,196,197</sup>		320	0.48	London <sup>150,198</sup>		29	0.39
Anatum <sup>†</sup>		139	2.19	Monophasic <sup>132,139,179,182,186,187,191,192,194,197</sup>		312	0.46	Derby <sup>150,198</sup>		27	0.36
Weltevreden <sup>84,100,110,112,119,128,171,173-175</sup>		86	1.35	Panama <sup>140,142,177-179,189,194,197</sup>		299	0.45	Bovismorbificans <sup>198,199</sup>		17	0.23
London <sup>80,84,92,93,98,103,110,119,169,170,172</sup>		78	1.23	Infantis <sup>140-142,176-179,183,184,189,192-194,197</sup>		275	0.41	Agona <sup>150,199,200</sup>		14	0.19
Meleagridis <sup>83,94,169,172</sup>		77	1.21	Brandenburg <sup>133,139,142,178-181,183,185,189,191,194</sup>		260	0.39	Anatum <sup>150,198</sup>		12	0.16
Enteritidis <sup>79,92-94,98,103,110</sup>		35	0.55	Livingstone <sup>*</sup>		207	0.31	Infantis <sup>150,198</sup>		11	0.15
Infantis <sup>79,84,170,172</sup>		29	0.46	London <sup>**</sup>		156	0.23	Heidelberg <sup>150,198</sup>		9	0.12
Agona <sup>80,83,94,169-172,174</sup>		28	0.44	Bredeney <sup>139-141,177,182,185,187,189,191,192,194-196</sup>		145	0.22	Johannesburg <sup>150,198</sup>		7	0.10
Corvallis <sup>100,105,110</sup>		24	0.38	Goldcoast <sup>141,142,179,185,191,194,197</sup>		114	0.17	Rissen <sup>150</sup>		7	0.10
Others <sup>‡</sup>		334	5.26	Others <sup>132,133,139-143,147,176-197</sup>		301	0.45	Others <sup>150,198,199</sup>		86	1.16

TS: total samples; PS: positive samples; PR: percentage ratio;

\*83,84,87,92-94,98,103,105,110,121,128,169,170,172,174,175; †80,83,84,100,105,110,112,119-122,128,169,171-173,175; ‡79,80,83,84,87,93,98,100,103,105,110,112,119-122,128,169-175; •139,141,142,177-179,182,183,188,192,194,196; \*\*139-142,178-180,185,186,188,189,191,192,194,197

**TABLE S8 Reported Serovars - Beef**

Continent	TS	PS	PR	Continent	TS	PS	PR	Continent	TS	PS	PR
Latin America	4,445	1,668	37.53	North America	12,217	2,444	20	Africa	12,921	1,459	11.29
<b>Serotypes</b>		<b>PS</b>	<b>PR</b>	<b>Serotypes</b>		<b>PS</b>	<b>PR</b>	<b>Serotypes</b>		<b>PS</b>	<b>PR</b>
Anatum <sup>6,153,200-205</sup>		240	5.40	Montevideo <sup>27,30,209-214</sup>		688	5.63	Typhimurium <sup>46,51,52,65,69,70,74,217-223</sup>		177	1.37
Typhimurium <sup>153,202-204,206,207</sup>		154	3.46	Anatum <sup>27,30,209-212</sup>		657	5.38	Enteritidis <sup>51,65,70,217,218,221,224</sup>		122	0.94
Meleagridis <sup>6,153,205</sup>		140	3.15	Mbandaka <sup>30,210-212,214</sup>		233	1.91	Anatum <sup>46,65,69,70,76,217-221,224-226</sup>		120	0.93
Agona <sup>6,153,202,203</sup>		93	2.09	Kentucky <sup>29,30,210-213</sup>		216	1.77	Dublin <sup>65,69,168,220,222,227-230</sup>		106	0.82
Sinstorf <sup>202-204</sup>		58	1.30	Cerro <sup>209-213,215,216</sup>		169	1.38	Bredeney <sup>70,218-220,230,231</sup>		96	0.74
Monophasic <sup>202</sup>		56	1.26	Typhimurium <sup>27,29,30,211-216</sup>		162	1.33	Saintpaul <sup>46,65,69,168,220,222,227,228</sup>		47	0.36
Infantis <sup>153,201-204,208</sup>		50	1.12	Muenster <sup>30,205,209,210,212-214,216</sup>		130	1.06	Infantis <sup>51,69,70,168,218,221,223</sup>		44	0.34
Give <sup>202-205,208</sup>		37	0.83	Reading <sup>30,205,210,212</sup>		96	0.79	Muenster <sup>217,230,231</sup>		42	0.33
Derby <sup>153,200,202,203,208</sup>		32	0.74	Meleagridis <sup>28,30,205,210,212,213</sup>		90	0.74	Newport <sup>69,74,218,222,225,230-232</sup>		36	0.28
Kentucky <sup>203,205</sup>		30	0.67	Agona <sup>28,210,212</sup>		44	0.36	Kentucky <sup>69,220,221,223</sup>		36	0.28
Panama <sup>201-204,207</sup>		30	0.67	Muenchen <sup>210-212</sup>		32	0.26	Haifa <sup>217,222,223</sup>		35	0.27
Others <sup>6,154,200-208</sup>		733	16.49	Others <sup>27-30,209-216</sup>		65	0.53	Others <sup>46,48,51,52,65,69,70,74,76,168,217-233</sup>		641	4.96
<b>Continent</b>	<b>TS</b>	<b>PS</b>	<b>PR</b>	<b>Continent</b>	<b>TS</b>	<b>PS</b>	<b>PR</b>	<b>Continent</b>	<b>TS</b>	<b>PS</b>	<b>PR</b>
Asia	1,862	369	19.82	Europe	61,595	725	1.18	Oceania	3,946	214	5.42
<b>Serotypes</b>		<b>PS</b>	<b>PR</b>	<b>Serotypes</b>		<b>PS</b>	<b>PR</b>	<b>Serotypes</b>		<b>PS</b>	<b>PR</b>
Agona <sup>80,87,234</sup>		46	2.47	Typhimurium <sup>139-143,176,184,235,236</sup>		211	0.34	Muenchen <sup>238,239</sup>		56	1.42
Weltevreden <sup>81,84,105,119,120</sup>		41	2.20	Derby <sup>139-143,176,237</sup>		95	0.15	Senftenberg <sup>238,239</sup>		21	0.53
Anatum <sup>80,84,104,105,120,127</sup>		34	1.83	Dublin <sup>139,141,235-237</sup>		51	0.08	Zanzibar <sup>238,240</sup>		19	0.48
Rissen <sup>84,105,120</sup>		31	1.66	Brandenburg <sup>142</sup>		38	0.06	Give <sup>238,239</sup>		17	0.43
Derby <sup>80,83,84,92,105,119,120,173,234</sup>		26	1.40	Monophasic <sup>139</sup>		30	0.05	Bredeney <sup>238</sup>		15	0.38
Thompson <sup>96,127</sup>		19	1.02	Rissen <sup>139</sup>		24	0.04	Typhimurium <sup>239,241</sup>		15	0.38
Typhimurium <sup>81,83,84,104,105,127</sup>		18	0.97	Mbandaka <sup>141,237</sup>		19	0.03	Anatum <sup>238,240</sup>		13	0.33
Senftenberg <sup>80,234</sup>		17	0.91	Enteritidis <sup>133,139,142,235</sup>		20	0.03	Virchow <sup>238,241</sup>		13	0.33
London <sup>84,92,105,119</sup>		16	0.86	Anatum <sup>139,140,142,237</sup>		15	0.02	Mbandaka <sup>238</sup>		12	0.30
Enteritidis <sup>80,81,83,92,104,127</sup>		15	0.81	Infantis <sup>142,184,237</sup>		15	0.02	Orion <sup>238-240</sup>		10	0.25
Meleagridis <sup>127,234</sup>		12	0.64	Kentucky <sup>139,141</sup>		14	0.02	Kottbus <sup>238</sup>		5	0.13
Others <sup>80,81,83,84,90,92,103-105,113,119,127,173,234</sup>		138	7.41	Others <sup>133,139-143,176,184,235-237</sup>		135	0.22	Others <sup>238-241</sup>		15	0.38

TS: total samples; PS: positive samples; PR: percentage ratio.

**TABLE S9 Reported Serovars - Seafood**

Continent	TS	PS	PR	Continent	TS	PS	PR	Continent	TS	PS	PR
Latin America	642	266	41.43	North America	11,625	388	3.34	Africa	1,463	143	9.77
Serotypes		PS	PR	Serotypes		PS	PR	Serotypes		PS	PR
Hadar <sup>242</sup>		20	3.12	Newport <sup>246-249</sup>		93	0.80	Hadar <sup>70,252</sup>		23	1.57
Heidelberg <sup>242</sup>		7	1.09	Weltevreden <sup>246,248,250</sup>		15	0.13	Blockley <sup>70,253</sup>		17	1.16
Infantis <sup>243,244</sup>		7	1.09	Mbandaka <sup>246,248</sup>		13	0.11	Enteritidis <sup>64</sup>		17	1.16
Madelia <sup>243,244</sup>		7	1.09	Muenchen <sup>246,251</sup>		13	0.11	Kentucky <sup>253,254</sup>		17	1.16
Brandenburg <sup>242,244</sup>		6	0.93	Paratyphi B <sup>249,250</sup>		12	0.10	Bredeney <sup>254</sup>		6	0.41
Panama <sup>242,243</sup>		6	0.93	Arizona <sup>249</sup>		10	0.09	Muenster <sup>255</sup>		6	0.41
Saintpaul <sup>242-244</sup>		6	0.93	Braenderup <sup>246,247,251</sup>		10	0.09	Typhimurium <sup>64,70,254</sup>		6	0.41
Braenderup <sup>243</sup>		5	0.78	Senftenberg <sup>247,248,250</sup>		10	0.09	Agona <sup>254</sup>		3	0.21
Mbandaka <sup>244</sup>		4	0.62	Tallahassee <sup>251</sup>		9	0.08	Derby <sup>254</sup>		3	0.21
Agona <sup>244</sup>		2	0.31	Agona <sup>249,251</sup>		8	0.07	Drac <sup>254</sup>		3	0.21
Anatum <sup>244</sup>		2	0.31	Typhimurium <sup>247-249</sup>		8	0.07	Typhi <sup>64</sup>		3	0.21
Others <sup>23,242-245</sup>		33	5.14	Others <sup>246-251</sup>		110	0.95	Others <sup>64,69,70,73,252-254</sup>		43	2.94
Continent	TS	PS	PR	Continent	TS	PS	PR	Continent	TS	PS	PR
Asia	5,552	2,230	40.17	Europe	9,620	465	4.83	Oceania	-	-	-
Serotypes		PS	PR	Serotypes		PS	PR	Serotypes		PS	PR
Weltevreden <sup>105,115,119,123,255-257</sup>		494	8.90	Typhimurium <sup>262-265</sup>		99	1.03	-		-	-
Typhimurium <sup>105,115,131,255-260</sup>		94	1.69	Senftenberg <sup>262-264</sup>		84	0.87	-		-	-
Enteritidis <sup>105,115,123,256,257,260</sup>		81	1.46	Monophasic <sup>262</sup>		28	0.29	-		-	-
Derby <sup>105,115,119,123,255,257</sup>		65	1.17	Newport <sup>262,265,266</sup>		25	0.26	-		-	-
Senftenberg <sup>115,123,256</sup>		62	1.12	Agona <sup>262-265</sup>		24	0.25	-		-	-
Stanley <sup>105,123,256-259</sup>		52	0.94	Derby <sup>262-265</sup>		21	0.22	-		-	-
Lexington <sup>105,115,119</sup>		51	0.92	Enteritidis <sup>262-265</sup>		11	0.11	-		-	-
Bareilly <sup>105,255-257</sup>		46	0.83	Saintpaul <sup>262, 266</sup>		11	0.11	-		-	-
Rissen <sup>105,115,257</sup>		43	0.77	Thompson <sup>263</sup>		11	0.11	-		-	-
Anatum <sup>105,115,255</sup>		42	0.76	Paratyphi B <sup>262-264</sup>		10	0.10	-		-	-
Aberdeen <sup>105,258</sup>		41	0.74	Bredeney <sup>262,264,265</sup>		7	0.07	-		-	-
Others <sup>80,105,115,119,123,131,255-261</sup>		1,295	23.32	Others <sup>262-266</sup>		131	1.36	-		-	-

TS: total samples; PS: positive samples; PR: percentage ratio.

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