

Suppl. Table 1. Bacterial genera that were represented both in the global diversity database of chicken cecal bacteria and in this study

Lineage	Genus	# of Seqs in global database	# of Seqs in this study
<i>Firmicutes; Clostridia; Clostridiales; Clostridiaceae 1</i>	<i>Clostridium sensu stricto</i>	1	1
<i>Actinobacteria; Actinobacteria; Coriobacteridae; Coriobacteriales; Coriobacterineae; Coriobacteriaceae</i>	<i>Enterorhabdus</i>	1	1
<i>Tenericutes; Mollicutes; Anaeroplasmatales; Anaeroplasmataceae</i>	<i>Anaeroplasma</i>	1	2
<i>Proteobacteria; Gammaproteobacteria; Enterobacteriales; Enterobacteriaceae</i>	<i>Proteus</i>	1	2
<i>Firmicutes; Clostridia; Clostridiales; Eubacteriaceae</i>	<i>Eubacterium</i>	1	10
<i>Firmicutes; Clostridia; Clostridiales; Ruminococcaceae</i>	<i>Acetanaerobacterium</i>	1	12
<i>Deferribacteres; Deferribacteres; Deferribacterales; Deferribacteraceae</i>	<i>Mucispirillum</i>	1	46
<i>Proteobacteria; Betaproteobacteria; Burkholderiales; Sutterellaceae</i>	<i>Parasutterella</i>	2	2
<i>Firmicutes; Clostridia; Clostridiales; Ruminococcaceae</i>	<i>Sporobacter</i>	2	2
<i>Proteobacteria; Epsilonproteobacteria; Campylobacterales; Helicobacteraceae</i>	<i>Helicobacter</i>	2	5
<i>Firmicutes; Clostridia; Clostridiales; Ruminococcaceae</i>	<i>Anaerofilum</i>	2	12
<i>Firmicutes; Clostridia; Clostridiales; Peptostreptococcaceae</i>	<i>Clostridium XI</i>	3	1
<i>Actinobacteria; Actinobacteria; Actinobacteridae; Bifidobacteriales; Bifidobacteriaceae</i>	<i>Bifidobacterium</i>	3	2
<i>Proteobacteria; Deltaproteobacteria; Desulfovibrionales; Desulfovibrionaceae</i>	<i>Desulfovibrio</i>	3	2
<i>Proteobacteria; Deltaproteobacteria; Desulfovibrionales; Desulfovibrionaceae</i>	<i>Bilophila</i>	3	5
<i>Bacteroidetes; Bacteroidia; Bacteroidales; Porphyromonadaceae</i>	<i>Parabacteroides</i>	3	17
<i>Firmicutes; Clostridia; Clostridiales; Lachnospiraceae</i>	<i>Roseburia</i>	3	23
<i>Firmicutes; Erysipelotrichia; Erysipelotrichales; Erysipelotrichaceae</i>	<i>Coprobacillus</i>	4	2
<i>Firmicutes; Erysipelotrichia; Erysipelotrichales; Erysipelotrichaceae</i>	<i>Clostridium XVIII</i>	4	34
<i>Firmicutes; Bacilli; Lactobacillales; Enterococcaceae</i>	<i>Enterococcus</i>	5	6
<i>Bacteroidetes; Bacteroidia; Bacteroidales; Porphyromonadaceae</i>	<i>Barnesiella</i>	5	62
<i>Firmicutes; Clostridia; Clostridiales; Lachnospiraceae</i>	<i>Coprococcus</i>	6	6
<i>Firmicutes; Clostridia; Clostridiales; Lachnospiraceae</i>	<i>Dorea</i>	8	1
<i>Firmicutes; Clostridia; Clostridiales; Ruminococcaceae</i>	<i>Flavonifractor</i>	8	110
<i>Bacteroidetes; Bacteroidia; Bacteroidales; Rikenellaceae</i>	<i>Rikenella</i>	9	1
<i>Firmicutes; Erysipelotrichia; Erysipelotrichales; Erysipelotrichaceae</i>	<i>Erysipelotrichaceae</i> <i>_incertae_sedis</i>	9	24
<i>Actinobacteria; Actinobacteria; Coriobacteridae; Coriobacteriales; Coriobacterineae; Coriobacteriaceae</i>	<i>Collinsella</i>	10	5
<i>Firmicutes; Clostridia; Clostridiales; Ruminococcaceae</i>	<i>Anaerotruncus</i>	10	13
<i>Firmicutes; Clostridia; Clostridiales; Lachnospiraceae</i>	<i>Clostridium XIVb</i>	10	38

<i>Firmicutes; Clostridia; Clostridiales; Ruminococcaceae</i>	<i>Pseudoflavonifractor</i>	10	68
<i>Firmicutes; Clostridia; Clostridiales; Ruminococcaceae</i>	<i>Acetivibrio</i>	12	4
<i>Firmicutes; Negativicutes; Selenomonadales; Acidaminococcaceae</i>	<i>Phascolarctobacterium</i>	15	7
<i>Proteobacteria; Alphaproteobacteria; Rhizobiales; Hyphomicrobiaceae</i>	<i>Gemmiger</i>	15	37
<i>Firmicutes; Clostridia; Clostridiales; Ruminococcaceae</i>	<i>Butyricoccus</i>	15	68
<i>Firmicutes; Clostridia; Clostridiales; Ruminococcaceae</i>	<i>Oscillibacter</i>	16	69
<i>Bacteroidetes; Bacteroidia; Bacteroidales; Rikenellaceae</i>	<i>Alistipes</i>	18	37
<i>Firmicutes; Clostridia; Clostridiales; Ruminococcaceae</i>	<i>Subdoligranulum</i>	19	6
<i>Firmicutes; Clostridia; Clostridiales; Lachnospiraceae</i>	<i>Blautia</i>	28	10
<i>Firmicutes; Bacilli; Lactobacillales; Lactobacillaceae</i>	<i>Lactobacillus</i>	32	21
<i>Proteobacteria; Gammaproteobacteria; Enterobacteriales; Enterobacteriaceae</i>	<i>Escherichia/Shigella</i>	33	4
<i>Firmicutes; Clostridia; Clostridiales; Lachnospiraceae</i>	<i>Clostridium XIVa</i>	39	3
<i>Bacteroidetes; Bacteroidia; Bacteroidales; Bacteroidaceae</i>	<i>Bacteroides</i>	45	41
<i>Firmicutes; Clostridia; Clostridiales; Ruminococcaceae</i>	<i>Clostridium IV</i>	49	28
<i>Firmicutes; Clostridia; Clostridiales; Ruminococcaceae</i>	<i>Faecalibacterium</i>	54	114
<i>Firmicutes; Clostridia; Clostridiales; Lachnospiraceae</i>	<i>Lachnospiraceae</i> <i>_incertae_sedis</i>	84	9

Suppl. Table 2. Bacterial genera not detected in this study but represented in the global diversity database of chicken cecal bacteria

Lineage	Genus	# of Sequences
<i>Proteobacteria; Gammaproteobacteria; Enterobacteriales; Enterobacteriaceae</i>	<i>Salmonella</i>	41
<i>Firmicutes; Negativicutes; Selenomonadales; Veillonellaceae</i>	<i>Megamonas</i>	22
<i>Bacteroidetes; Bacteroidia; Bacteroidales; Prevotellaceae;</i>	<i>Paraprevotella</i>	16
<i>Actinobacteria; Actinobacteria; Coriobacteridae; Coriobacteriales; Coriobacterineae; Coriobacteriaceae</i>	<i>Olsenella</i>	8
<i>Proteobacteria; Gammaproteobacteria; Enterobacteriales; Enterobacteriaceae</i>	<i>Klebsiella</i>	6
<i>Firmicutes; Clostridia; Clostridiales; Lachnospiraceae</i>	<i>Lactonifactor</i>	6
<i>Firmicutes; Negativicutes; Selenomonadales; Veillonellaceae</i>	<i>Megasphaera</i>	5
<i>Proteobacteria; Gammaproteobacteria; Pseudomonadales; Pseudomonadaceae</i>	<i>Pseudomonas</i>	5
<i>Firmicutes; Clostridia; Clostridiales; Lachnospiraceae</i>	<i>Robinsoniella</i>	5
<i>Firmicutes; Clostridia; Clostridiales; Lachnospiraceae</i>	<i>Anaerostipes</i>	4
<i>Verrucomicrobia; Verrucomicrobiae; Verrucomicrobiales; Verrucomicrobiaceae</i>	<i>Akkermansia</i>	3
<i>Proteobacteria; Gammaproteobacteria; Enterobacteriales; Enterobacteriaceae</i>	<i>Enterobacter</i>	3
<i>Proteobacteria; Gammaproteobacteria; Aeromonadales; Succinivibrionaceae</i>	<i>Succinatimonas</i>	3
<i>Firmicutes; Clostridia; Clostridiales; Clostridiales_Incertae_Sedis_XIII</i>	<i>Anaerovorax</i>	2
<i>Actinobacteria; Actinobacteria; Coriobacteridae; Coriobacteriales; Coriobacterineae; Coriobacteriaceae</i>	<i>Coriobacterium</i>	2
<i>Bacteroidetes; Bacteroidia; Bacteroidales; Prevotellaceae</i>	<i>Hallella</i>	2
<i>Firmicutes; Clostridia; Clostridiales; Lachnospiraceae</i>	<i>Hespellia</i>	2
<i>Proteobacteria; Betaproteobacteria; Burkholderiales; Oxalobacteraceae</i>	<i>Massilia</i>	2
<i>Proteobacteria; Gammaproteobacteria; Xanthomonadales; Xanthomonadaceae</i>	<i>Stenotrophomonas</i>	2
<i>Proteobacteria; Betaproteobacteria; Burkholderiales; Sutterellaceae</i>	<i>Sutterella</i>	2
<i>Proteobacteria; Deltaproteobacteria; Bdellovibrionales; Bdellovibrionaceae</i>	<i>Vampirovibrio</i>	2
<i>Firmicutes; Negativicutes; Selenomonadales; Acidaminococcaceae</i>	<i>Acidaminococcus</i>	1
<i>Proteobacteria; Gammaproteobacteria; Aeromonadales; Aeromonadaceae</i>	<i>Aeromonas</i>	1
<i>Fusobacteria; Fusobacteria; Fusobacteriales; Fusobacteriaceae</i>	<i>Clostridium XIX</i>	1
<i>Proteobacteria; Gammaproteobacteria; Pasteurellales; Pasteurellaceae</i>	<i>Gallibacterium</i>	1
<i>Firmicutes; Clostridia; Clostridiales; Peptococcaceae 1</i>	<i>Peptococcus</i>	1
<i>Spirochaetes; Spirochaetes; Spirochaetales; Spirochaetaceae</i>	<i>Spirochaeta</i>	1
<i>Firmicutes; Clostridia; Clostridiales; Lachnospiraceae</i>	<i>Syntrophococcus</i>	1
<i>Proteobacteria; Gammaproteobacteria; Enterobacteriales; Enterobacteriaceae</i>	<i>Trabulsiella</i>	1

Suppl. Table 3. Bacterial genera detected in this study but not represented in the global diversity database of chicken cecal bacteria

<b>Lineage</b>	<b>Genus</b>	<b># of Sequence</b>
<i>Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae</i>	<i>Butyricimonas</i>	38
<i>Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae</i>	<i>Odoribacter</i>	26
<i>Firmicutes;Clostridia;Clostridiales;Ruminococcaceae</i>	<i>Hydrogenoanaerobacterium</i>	10
<i>Firmicutes;Clostridia;Clostridiales;Lachnospiraceae</i>	<i>Moryella</i>	7
<i>Firmicutes;Clostridia;Clostridiales;Lachnospiraceae</i>	<i>Parasporobacterium</i>	6
<i>Firmicutes;Clostridia;Clostridiales;Ruminococcaceae</i>	<i>Ruminococcus</i>	5
<i>Firmicutes;Clostridia;Clostridiales;Ruminococcaceae</i>	<i>Saccharofermentans</i>	5
<i>Actinobacteria;Actinobacteria;Actinobacteridae;Bifidobacteriales;Bifidobacteriaceae</i>	<i>Aeriscardovia</i>	4
<i>Firmicutes;Clostridia;Clostridiales;Ruminococcaceae</i>	<i>Clostridium III</i>	4
<i>Firmicutes;Clostridia;Clostridiales;Ruminococcaceae</i>	<i>Ethanoligenens</i>	4
<i>Firmicutes;Clostridia;Clostridiales;Lachnospiraceae</i>	<i>Marvinbryantia</i>	3
<i>Firmicutes;Bacilli;Bacillales;Staphylococcaceae</i>	<i>Salinicoccus</i>	3
<i>Firmicutes;Bacilli;Lactobacillales;Streptococcaceae</i>	<i>Streptococcus</i>	3
<i>Firmicutes;Clostridia;Clostridiales;Incertae Sedis XI</i>	<i>Anaerosphaera</i>	2
<i>Actinobacteria;Actinobacteria;Coriobacteridae;Coriobacteriales;Coriobacterineae;Coriobacteriaceae</i>	<i>Eggerthella</i>	2
<i>Fusobacteria;Fusobacteria;Fusobacteriales;Fusobacteriaceae</i>	<i>Fusobacterium</i>	2
<i>Firmicutes;Clostridia;Clostridiales;Lachnospiraceae;</i>	<i>Lachnospira</i>	2
<i>Actinobacteria;Actinobacteria;Coriobacteridae;Coriobacteriales;Coriobacterineae;Coriobacteriaceae</i>	<i>Slackia</i>	2
<i>Firmicutes;Clostridia;Clostridiales;Lachnospiraceae</i>	<i>Sporobacterium</i>	2
<i>Firmicutes;Bacilli;Bacillales;Staphylococcaceae</i>	<i>Staphylococcus</i>	2
<i>Lentisphaerae;Lentisphaeria;Victivallales;Victivallaceae</i>	<i>Victivallis</i>	2
<i>Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae</i>	<i>Allobaculum</i>	1
<i>Firmicutes;Bacilli;Lactobacillales;Carnobacteriaceae</i>	<i>Atopostipes</i>	1
<i>Firmicutes;Clostridia;Clostridiales;Lachnospiraceae</i>	<i>Butyrivibrio</i>	1
<i>Synergistetes;Synergistia;Synergistales;Synergistaceae</i>	<i>Dethiosulfovibrio</i>	1
<i>Actinobacteria;Actinobacteria;Actinobacteridae;Actinomycetales;Corynebacterineae;Dietziaceae</i>	<i>Dietzia</i>	1
<i>Firmicutes;Bacilli;Lactobacillales;Carnobacteriaceae</i>	<i>Dolosigranulum</i>	1
<i>Firmicutes;Clostridia;Clostridiales;Ruminococcaceae</i>	<i>Fastidiosipila</i>	1
<i>Firmicutes;Bacilli;Bacillales;Paenibacillaceae 1</i>	<i>Fontibacillus</i>	1
<i>Actinobacteria;Actinobacteria;Coriobacteridae;Coriobacteriales;Coriobacterineae;Coriobacteriaceae</i>	<i>Gordonibacter</i>	1
<i>Firmicutes;Erysipelotrichia;Erysipelotrichales;Erysipelotrichaceae</i>	<i>Holdemania</i>	1
<i>Firmicutes;Clostridia;Clostridiales;Gracilibacteraceae</i>	<i>Lutispora</i>	1
<i>Firmicutes;Bacilli;Bacillales;Staphylococcaceae</i>	<i>Nosocomiicoccus</i>	1
<i>Firmicutes;Clostridia;Clostridiales;Lachnospiraceae</i>	<i>Oribacterium</i>	1
<i>Firmicutes;Clostridia;Clostridiales;Syntrophomonadaceae</i>	<i>Pelospira</i>	1
<i>Firmicutes;Clostridia;Clostridiales;Eubacteriaceae</i>	<i>Pseudoramibacter</i>	1
<i>Firmicutes;Clostridia;Clostridiales;Clostridiaceae 1</i>	<i>Sarcina</i>	1
<i>Bacteroidetes;Bacteroidia;Bacteroidales;Porphyromonadaceae</i>	<i>Tannerella</i>	1
<i>Firmicutes;Clostridia;Clostridiales;Clostridiales_Incertae Sedis XI</i>	<i>Tepidimicrobium</i>	1