Table S1. Total species identified in raw unpreserved milk sample using MALDI-TOF MS.

Batch 1		Batch 2		Batch 3		Batch 4	
Organism name	**Count**	**Organism name**	**Count**	**Organism name**	**Count**	**Organism name**	**Count**
Chryseobacterium vrystaatense	28	*Lactococcus lactis*	25	*Lactococcus garvieae*	16	*Lactococcus lactis*	14
Serratia liquefaciens	18	*Acinetobacter johnsonii*	12	*Lactococcus lactis*	11	*Lactococcus garvieae*	10
Lactococcus lactis	10	*Enterococcus faecalis*	12	*Chryseobacterium joostei*	7	*Acinetobacter johnsonii*	6
Rhodococcus erythropolis	10	*Chryseobacterium vrystaatense*	5	*Enterobacter cloacae*	7	*Enterococcus faecalis*	6
Acinetobacter johnsonii	8	*Enterobacter cloacae*	3	*Klebsiella pneumoniae*	4	*Macrococcus caseolyticus*	3
Corynebacterium phoceense	6	*Microbacterium liquefaciens*	3	*Acinetobacter johnsonii*	3	*Microbacterium liquefaciens*	3
Ochrobactrum grignonense	5	*Aquamicrobium lusatiense*	2	*Raoultella ornithinolytica*	3	*Stenotrophomonas maltophilia*	3
Acinetobacter guillouiae	4	*Corynebacterium xerosis*	2	*Enterobacter asburiae*	2	*Enterobacter cloacae*	2
Aerococcus viridans	4	*Microvirgula aerodenitrificans*	2	*Enterococcus faecalis*	2	*Microbacterium maritypicum*	2
Alcaligenes faecalis	4	*Raoultella ornithinolytica*	2	*Macrococcus caseolyticus*	2	*Acinetobacter baumannii*	1
Microbacterium maritypicum	4	*Aerococcus viridans*	1	*Pseudomonas putida*	2	*Aquamicrobium lusatiense*	1
Brachybacterium nesterenkovii	3	*Chryseobacterium oncorhynchi*	1	*Chryseobacterium spp*	1	*Enterobacter bugandensis*	1
Corynebacterium casei	3	*Corynebacterium casei*	1	*Chryseobacterium tructae*	1	*Enterobacter ludwigii*	1
Eriwinia spp. *	3	*Enterobacter asburiae*	1	*Citrobacter braakii*	1	*Enterobacter* spp. *	1
Corynebacterium xerosis	2	*Lactobacillus curvatus*	1	*Corynebacterium casei*	1	*Klebsiella oxytoca*	1
Klebsiella oxytoca	2	*Moraxella osloensis*	1	*Corynebacterium* spp. *	1	*Moraxella osloensis*	1
Pseudoclavibacter helvolus	2	*Staphylococcus haemolyticus*	1	*Corynebacterium variabile*	1	*Raoultella ornithinolytica*	1
Pseudomonas oleovorans	2	*Staphylococcus hominis*	1	*Enterobacter bugandensis*	1	*Rhodococcus erythropolis*	1
Pseudomonas spp. *	2			*Enterobacter hormaechei*	1		
Raoultella ornithinolytica	2			*Flavobacterium lindanitolerans*	1		
Acinetobacter lwoffii	1			*Klebsiella oxytoca*	1		
Chryseobacterium rhizosphaerae	1			*Microbacterium maritypicum*	1		
Corynebacterium glutamicum	1			*Pseudomonas* spp. *	1		
Enterobacter cloacae	1			*Rothia endophytica*	1		
Massilia timonae	1			*Sphingobacterium multivorum*	1		
Microbacterium liquefaciens	1			*Sphingobacterium spiritivorum*	1		
Micrococcus luteus	1			*Sphingobacterium* spp. *	1		
Pseudomonas stutzeri	1			*Stenotrophomonas maltophilia*	1		
Rhodococcus baikonurensis	1			*Stenotrophomonas* spp.	1		

* the isolates were identified to the genus level.

Table S2. Total species identified in preserved milk using MALDI-TOF MS.

Batch 1		Batch 2		Batch 3		Batch 4	
Organism name	**Count**	**Organism name**	**Count**	**Organism name**	**Count**	**Organism name**	**Count**
Chryseobacterium vrystaatense	47	*Lactococcus lactis*	21	*Lactococcus lactis*	19	*Lactococcus lactis*	15
Lactococcus lactis	21	*Enterococcus faecalis*	11	*Lactococcus garvieae*	12	*Lactococcus garvieae*	10
Serratia liquefaciens	16	*Acinetobacter johnsonii*	4	*Chryseobacterium joostei*	3	*Macrococcus caseolyticus*	10
Acinetobacter johnsonii	7	*Chryseobacterium joostei*	3	*Macrococcus caseolyticus*	3	*Enterococcus faecalis*	8
Microbacterium maritypicum	6	*Chryseobacterium vrystaatense*	3	*Acinetobacter guillouiae*	2	*Acinetobacter johnsonii*	2
Corynebacterium casei	3	*Aerococcus viridans*	1	*Enterobacter bugandensis*	2	*Microbacterium maritypicum*	2
Corynebacterium phoceense	3	*Apiotrichum loubieri*	1	*Enterobacter cloacae*	2	*Stenotrophomonas maltophilia*	2
Acinetobacter guillouiae	2	*Aquamicrobium lusatiense*	1	*Enterococcus faecalis*	1	*Acetobacter cibinongensis*	1
Aerococcus viridans	2	*Chryseobacterium ureilyticum*	1	*Staphylococcus succinus*	1	*Enterobacter cloacae*	1
Alcaligenes faecalis	2	*Corynebacterium* spp. *	1	*Stenotrphomonas maltophilia*	1	*Enterobacter* spp. *	1
Chryseobacterium indoltheticum	2	*Enterobacter bugandensis*	1			*Escherichia coli*	1
Corynebacterium confusum	2	*Enterococcus italicus*	1			*Microbacterium liquefaciens*	1
Klebsiella oxytoca	2	*Lactobacillus curvatus*	1			*Raoultella ornithinolytica*	1
Lactobacillus fructivorans	2	*Lactococcus garvieae*	1			*Raoultella terrigena*	1
Ochrobactrum grignonense	2	*Macrococcus caseolyticus*	1				
Carnobacterium maltaromaticum	1	*Microbacterium liquefaciens*	1				
Corynebacterium frankenforstense	1	*Microbacterium maritypicum*	1				
Corynebacterium glutamicum	1	*Microbacterium oxydans*	1				
Enterobacter cloacae	1	*Microvirqula aerodenitrificans*	1				
Erwinia spp. *	1	*Rhodococcus erythropolis*	1				
Ochrobactrum spp. *	1						
Pseudomonas spp. *	1						
Raoultella spp. *	1						
Sphingobacterium multivorum	1						
Stenotrophomonas maltophilia	1						
Streptococcus parauberis	1						

* the isolates were identified to the genus level.

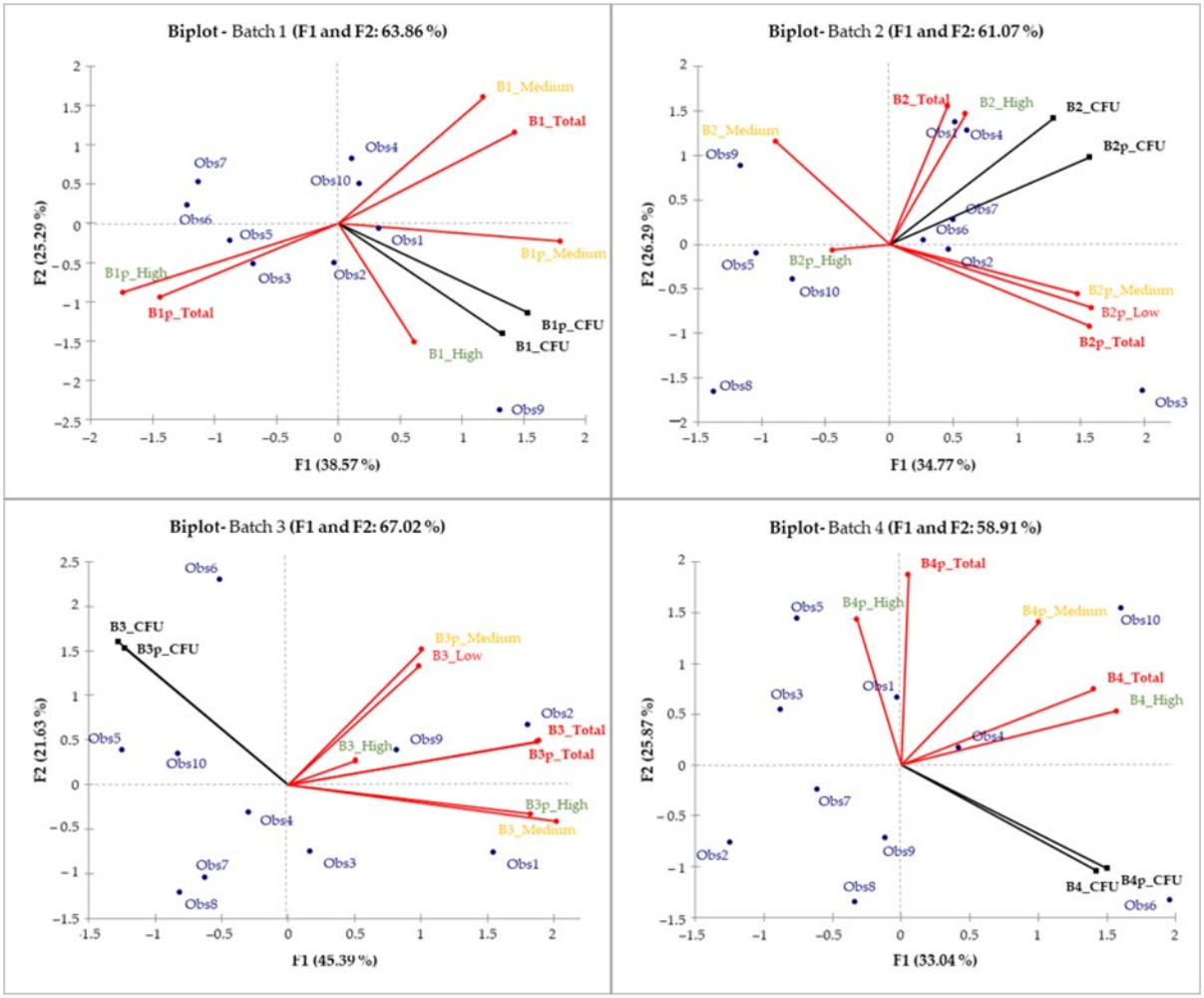

Figure S1. Biplots of the principal component analysis conducted on each milk batch separately (Batch 1 to Batch 4) for the CFU values (total number of aerobic mesophilic bacteria) and the identification levels of bacteria (High, Medium, Low and Total) in ten observation (Obs1 to Obs10), for analyzed row milk (B1, B2, B3 & B4) and preserved milk (Bp1, Bp2, Bp3 & Bp4).