

Table S1. Prevalence of microorganisms isolated in association with 41 lambs without apparent signs of umbilical infections identified by mass spectrometry* (2022–2023)

Microorganisms associated	N	%
<i>Exiguobacterium</i> sp. + <i>Pseudomonas chlororaphis</i> + <i>Pseudomonas protegens</i> + <i>Staphylococcus aureus</i>	1	2.8
<i>Pantoea agglomerans</i> + <i>Pseudomonas koreensis</i>	1	2.8
<i>Staphylococcus aureus</i> + Not identified	1	2.8
<i>Desemzia incerta</i> + <i>Pseudomonas stutzeri</i> + <i>Enterobacter kobei</i>	1	2.8
<i>Exiguobacterium mexicanum</i> + <i>Pseudomonas stutzeri</i>	1	2.8
<i>Desemzia incerta</i> + <i>Pseudomonas stutzeri</i> + <i>Staphylococcus succinus</i> + <i>Staphylococcus xylosus</i> + <i>Escherichia coli</i>	1	2.8
<i>Exiguobacterium mexicanum</i> + <i>Planococcus glaciei</i> + <i>Staphylococcus succinus</i>	1	2.8
<i>Pantoea agglomerans</i> + Not identified	1	2.8
<i>Serratia fonticola</i> + Not identified	1	2.8
<i>Pseudomonas azotoformans</i> + <i>Desemzia incerta</i> + <i>Curtobacterium</i> sp. + Not identified	1	2.8
<i>Pseudomonas flavescens</i> + <i>Desemzia incerta</i> + Not identified	1	2.8
<i>Pseudomonas flavescens</i> + <i>Desemzia incerta</i> + <i>Pantoea agglomerans</i> + Not identified	1	2.8
<i>Pseudomonas straminea</i> + <i>Desemzia incerta</i> + <i>Pantoea</i> sp. + Not identified	1	2.8
<i>Pseudomonas flavescens</i> + <i>Pseudomonas</i> sp. + <i>Desemzia incerta</i> + <i>Arthrobacter koreensis</i>	1	2.8
<i>Desemzia incerta</i> + <i>Acinetobacter lwoffii</i> + <i>Pantoea</i> sp.	1	2.8
<i>Desemzia incerta</i> + <i>Serratia marcescens</i> + <i>Pantoea</i> sp.	1	2.8
<i>Serratia marcescens</i> + <i>Pantoea</i> sp. + Not identified	1	2.8
<i>Desemzia incerta</i> + <i>Pantoea</i> sp. + <i>Enterobacter kobei</i>	1	2.8
<i>Pseudomonas koreensis</i> + <i>Pseudomonas azotoformans</i> + <i>Desemzia incerta</i> + <i>Paenibacillus provencensis</i> + Not identified	1	2.8
<i>Desemzia incerta</i> + <i>Acinetobacter lwoffii</i> + <i>Arthrobacter gandavensis</i> + <i>Solibacillus silvestris</i> + Not identified	1	2.8
<i>Staphylococcus succinus</i> + <i>Lactococcus garvieae</i> + <i>Pseudomonas fulva</i> + <i>Nocardiopsis dassonvillei</i>	1	2.8
<i>Staphylococcus xylosus</i> + <i>Enterococcus faecium</i> + <i>Nocardiopsis dassonvillei</i>	1	2.8
<i>Bacillus megaterium</i> + <i>Desemzia incerta</i> + Not identified	1	2.8
<i>Aerococcus viridans</i> + <i>Staphylococcus succinus</i> + <i>Pseudomonas</i> sp.	1	2.8
<i>Serratia liquefaciens</i> + <i>Pseudomonas chlororaphis</i>	1	2.8
Others**	11	30
TOTAL	36	100

* MALDI-TOF MS = Matrix-assisted laser desorption ionization time-of-flight mass spectrometry; N = number of associations, % = frequency of associations; ** *Aeromonas hydrophila* + *Pseudomonas corrugata* (n = 1), *P. koreensis* + *S. fonticola* (n = 1), *Pseudomonas vancouverensis* + *S. fonticola* (n = 1), *Pantoea ananatis* + *P. agglomerans* (n = 1), *Pantoea* sp. + *N. dassonvillei* (n = 1), *Proteus penneri* + *S. fonticola* + *Providencia rettgeri* (n = 1), *Serratia nematodiphila* + *P. rettgeri* + *P. jessenii* (n = 1), *D. incerta* + *Pseudomonas fluorescens* + *A. hydrophila* (n = 1), *E. coli* + *Klebsiella variicola* + *P. koreensis* (n = 1), *E. coli* + *P. penneri* + *Klebsiella pneumoniae* + *Citrobacter braakii* (n = 1), *P. chlororaphis* + *Proteus vulgaris* (n = 1).