

Figure S1. Phylogenetic tree based on the *mgc2* sequence of the MG isolates. Sample name and host are reported in font color accordance with the relative *mgc2* type. Cutoff of bootstrap values was set to 50. Phylogenetic distance bar is represented below.

Table S1. Primer sequences and expected amplicon size (bp) of the PCR protocols described in this study.

Gene Target	Primer Forward (5'->3')	Primer Reverse (5'->3')	PCR Amplicon Size (bp)
<i>gapA</i>	GAAC TGAT TTGGAA GCGTAAGA	CCGTTATATCATCCTGAAT CTCCT	110
<i>mgc2</i>	CGCAATTGGTCCTA ATCCCCAACAA	TAAACC CACCTCCAGCTTTATTTC C	237-300
<i>atpG</i>	TGGA ACTAAACTAA ATT CGTTTTAAGA	TAGCATACTCACACACTTT GGATTCA	395
<i>dnaA</i>	GAGCGTCAAAAATT ATTCCCAGA	TTACGAATATGCCCTTCAT CAA	461
<i>fusA</i>	CAGTAGCAGTATTAG ATGCCCAAATG	TAGTAGGGATCTGTACTTC TTCACCAA	597
<i>rpoB</i>	GTTAATGCTTAAAGA ACAAC TTGATT TATT	GGTTAATTGGTGC GTGTTA AAGAA	562
<i>ruvB</i>	CAACGACAATGTATG GCAGGAT	AAACAATCAATTCCACTTA TTAGTGAAA	388
<i>uvrA</i>	TTTACCAATCTTAAT GTGAATAAGCC	CCGTTCCCTGGGTGGAGTT	536

Table S2. Allele distribution into sequence type of Italian samples analyzed.

MLST Target	Observed Number of Allele Variants (Number of Known Variants ¹⁾	Prevalent Allele Number ² (Number of Samples)
<i>atpG</i>	5 (24)	8 (23), 2 (6)
<i>dnaA</i>	7 (22)	1 (23), 5(6)
<i>fusA</i>	8 (27)	16 (20), 14 (5)
<i>rpoB</i>	12 (33)	15 (11), 3 (4), 5 (4), 7 (4), 8 (4), 17 (4)
<i>ruvB</i>	5 (24)	1 (15), 2 (14)
<i>uvrA</i>	7 (24)	12 (17), 5(8)

¹ Based on <https://pubmlst.org/mgallisepticum/> updated on August 2020. ² Allele sequence present in >50% of samples.

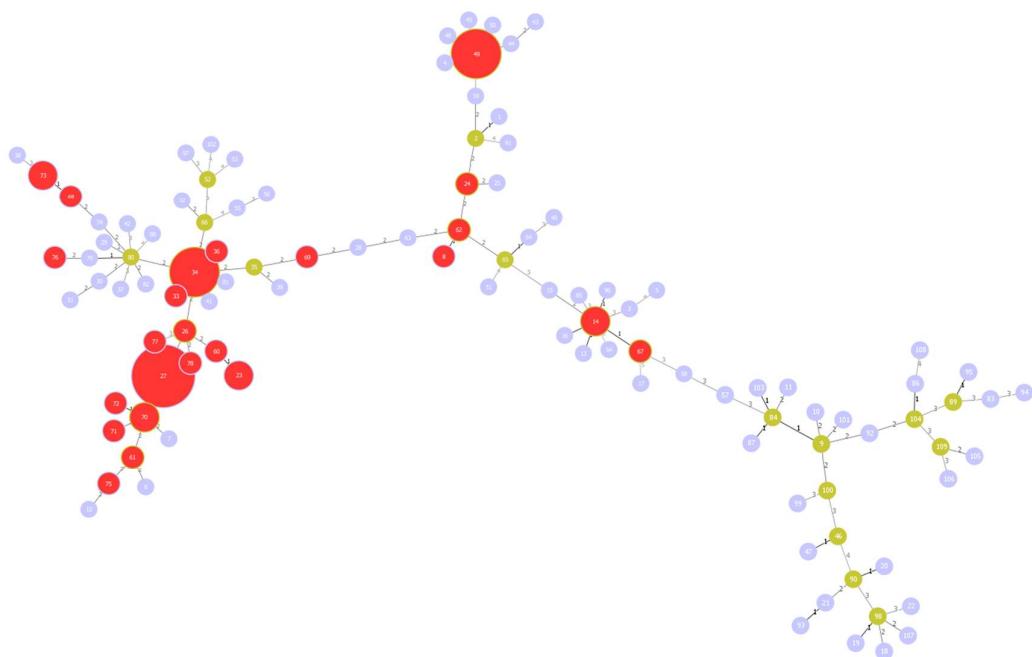


Figure S2. Full MST tree MG MLST 6-genes. Dispersion of full MST of all described six-alleles scheme ST profiles with PubMLST database updated to August 2020. Red circles are Italian ST described in this study, green ST the nodal points, and in light grey, other known STs.