

Supplementary table 3. Flagellum-related genes and chemotaxis genes located in 58.8-kb locus of *M. morganii*

Gene#	Gene	Description
MM1735	<i>fliZ</i>	flagella biosynthesis protein FliZ
MM1736	<i>fliA</i>	flagellar biosynthesis sigma factor
MM1737	<i>fliC</i>	flagellin
MM1738	<i>fliC</i>	flagellin
MM1739	-	LysR family transcriptional regulator
MM1740	<i>fliD</i>	flagellar filament capping protein
MM1741	<i>fliS</i>	flagellar protein FliS
MM1742	<i>fliT</i>	putative flagellar biosynthesis; export chaperone for FliD
MM1743	<i>ccrB</i>	camphor resistance protein CrcB
MM1744	-	CrcB protein
MM1745	-	putative O-antigen polymerase
MM1746	-	lipoprotein
MM1747	-	hypothetical protein
MM1748	-	membrane protein
MM1749	-	hypothetical protein
MM1750	<i>fliE</i>	flagellar hook-basal body complex protein flie
MM1751	<i>fliF</i>	flagellar MS-ring protein
MM1752	<i>fliG</i>	flagellar motor switch protein G
MM1753	<i>fliH</i>	flagellar assembly protein H
MM1754	<i>fliI</i>	flagellum-specific ATP synthase
MM1755	<i>fliJ</i>	flagellar biosynthesis chaperone
MM1756	<i>fliK</i>	flagellar hook-length control protein FliK

MM1757	<i>fliL</i>	flagellar basal body-associated protein FliL
MM1758	<i>fliM</i>	flagellar motor switch protein FliM
MM1759	<i>fliN</i>	flagellar motor switch and energizing protein
MM1760	<i>fliO</i>	flagellar biosynthesis protein
MM1761	<i>fliP</i>	Flagellar biosynthetic protein fliP
MM1762	<i>fliQ</i>	flagellar biosynthesis protein FliQ
MM1763	<i>fliR</i>	flagellar biosynthesis protein FliR
MM1764	-	short-chain dehydrogenase/reductase SDR
MM1765	-	putative Transcription factor, LysR family
MM1766	<i>flgL</i>	flagellar hook-associated protein 3
MM1767	<i>flgK</i>	flagellar hook-associated protein 1
MM1768	<i>flgJ</i>	flagellar rod assembly protein/muramidase FlgJ
MM1769	<i>flgI</i>	putative flagella basal body protein
MM1770	<i>flgH</i>	flagellar basal body L-ring protein
MM1771	<i>flgG</i>	flagellar basal-body rod protein
MM1772	<i>flgF</i>	flagellar basal-body rod protein
MM1773	<i>flgE</i>	flagellar hook protein FlgE
MM1774	<i>flgD</i>	basal-body rod modification protein
MM1775	<i>flgC</i>	flagellar basal body rod protein FlgC
MM1776	<i>flgB</i>	flagellar basal body rod protein FlgB
MM1777	<i>flgA</i>	basal-body periplasmic P ring assembly protein
MM1778	<i>flgM</i>	anti-sigma28 factor
MM1779	<i>flgN</i>	flagella synthesis protein
MM1780	<i>xptA1</i>	insecticidal toxin complex protein A

MM1781	<i>xptA1</i>	insecticidal toxin complex protein A
MM1782	<i>xptC1</i>	insecticidal toxin complex protein B
MM1783	<i>flhA</i>	flagellar biosynthesis protein FlhA
MM1784	<i>flhB</i>	flagellar biosynthesis protein FlhB
MM1785	-	hypothetical protein
MM1786	<i>cheZ</i>	chemotaxis regulator CheZ
MM1787	<i>cheY</i>	chemotaxis regulatory protein CheY
MM1788	<i>cheB</i>	chemotactic response regulator in two-component regulatory system with CheA
MM1789	<i>cheR</i>	chemotaxis methyltransferase CheR
MM1790	<i>tap</i>	methyl-accepting chemotaxis protein IV
MM1791	<i>cheD</i>	methyl-accepting chemotaxis protein I
MM1792	<i>cheW</i>	purine-binding chemotaxis protein; regulation
MM1793	<i>cheA</i>	chemotaxis protein CheA
MM1794	<i>motB</i>	motility protein B
MM1795	<i>motA</i>	proton conductor component of motor, torque generator
MM1796	<i>flhC</i>	transcriptional regulator of flagellar class II biosynthesis, anaerobic respiration and the Entner-Doudoroff pathway, tetramer with FlhD
MM1797	<i>flhD</i>	transcriptional activator FlhD

41 flagellum-related genes were in red colors, 8 chemotaxis genes were in green colors, 11 other genes were in blue colors.