

**Table S3.** GXM composition (mol %).

A. *USV101* strains

Strain	Xylose	Glucuronic Acid	Mannose
KN99 $\alpha$	33.6	11.9	54.6
<i>usv101</i> $\Delta$	41.1	8.1	50.8
<i>USV101</i> <sub>OE</sub>	33.0	10.1	56.8

B. *UXS1* strains

Strain	Xylose	Glucuronic Acid	Mannose
KN99 $\alpha$	25.8	7.0	67.2
<i>uxs1</i> $\Delta$	-	10.0	90.0
<i>UXS1</i>	25.5	8.0	66.5
<i>UXS1</i> <sub>OE</sub>	29.5	6.7	63.8