$\textbf{Figure S1}: HPAEC-PAD\ chromatograms\ of\ the\ enzymatic\ treatment\ of\ XGO1\ by\ using\ LacS\ 2.2\ U\ and\ XylS\ 0.1\ U$

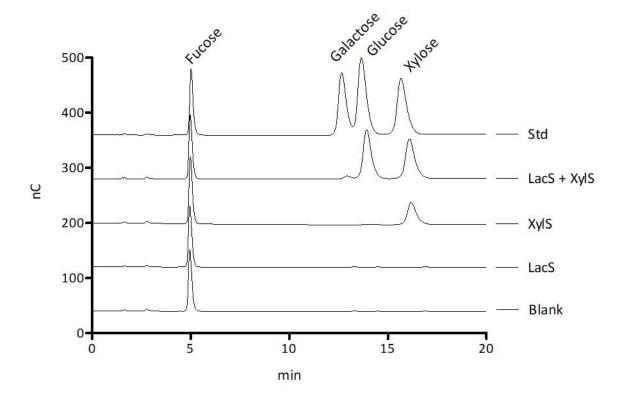


Figure S2: HPAEC-PAD chromatograms of the time course of the enzymatic treatment of XGO1 by using LacS 2.2 U and XylS 0.1 U

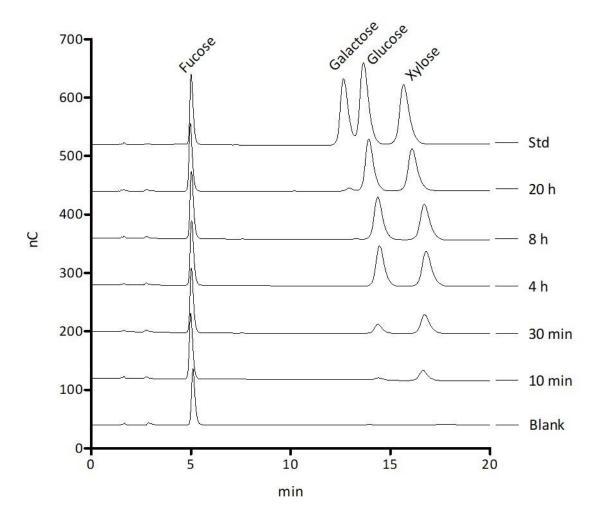


Figure S3: HPAEC-PAD chromatograms of the enzymatic treatment of XGO1 by using LacS 18 U and XylS 0.1 U

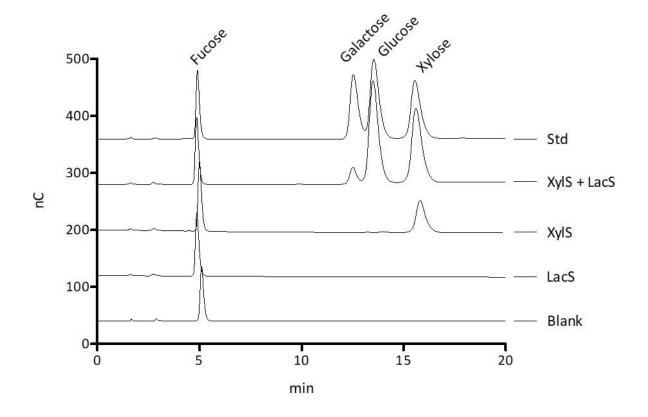


Figure S4: HPAEC-PAD chromatograms of the time course of the enzymatic treatment of XGO1 by using LacS 18 U and XylS 0.1 U

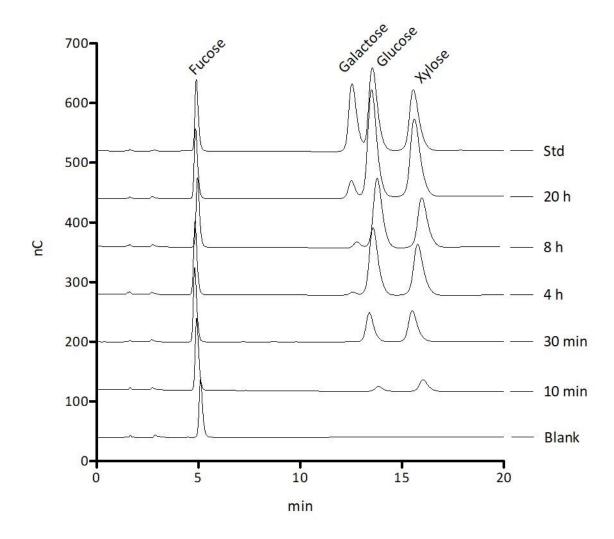


Figure S5: HPAEC-PAD chromatograms of the enzymatic treatment of XGO2 by LacS 2.2 U, XylS 0.1 U and $Ss\alpha$ Fuc 0.3 U

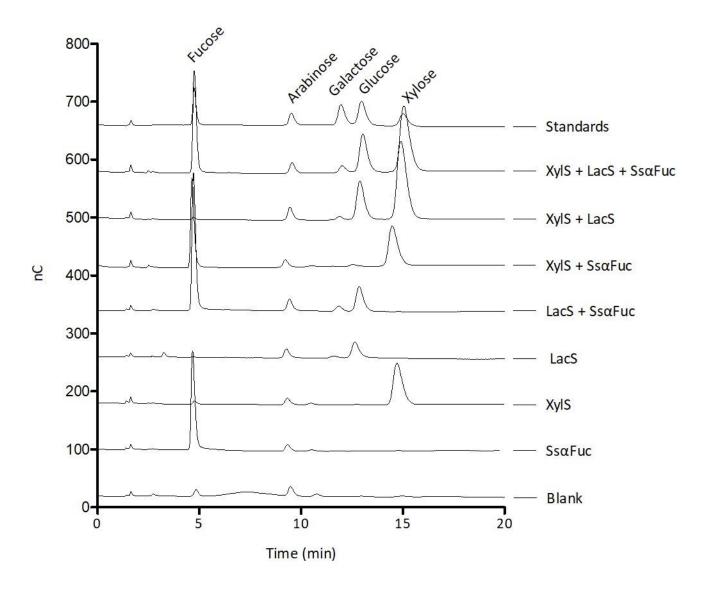
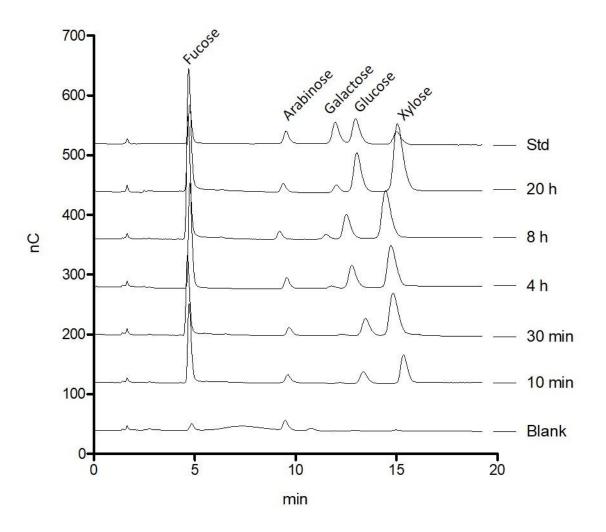


Figure S6: HPAEC-PAD chromatograms of the time course of the enzymatic treatment of XGO2 by LacS 2.2 U, XylS 0.1 U and $Ss\alpha Fuc$ 0.3 U



 $\textbf{Table S1} : \textbf{Monosaccharides composition from the time course of the enzymatic treatment of XGO1 by using LacS 2.2 U and XylS 0.1 U and SylS 0.1 U and$

Time	Galactose (μg)	Glucose (µg)	Xylose (μg)
T _o	ND	ND	ND
10 min	ND	8.6 ± 1.2	45.2 ± 4
30 min	ND	26.9 ± 0.5	66.7 ±1
4 h	ND	110.9 ± 2.4	111.7 ± 0.7
8 h	2.9 ± 0.3	128.5 ± 7	130.6 ±3
20 h	12.3 ± 1.1	158.3 ± 1.3	149.7 ± 1

Table S2: monosaccharides composition from the time course of the enzymatic treatment of XGO1 by using LacS 18 U and XylS 0.1 U

Time	Galactose (μg) Glucose (μg)		Xylose (μg)	
T_{o}	ND	ND	ND	
10 min	ND	17.1 ± 0.3	52.7 ± 3.5	
30 min	ND	89.5 ± 3	128.5 ± 3	
4 h	10.9 ± 0.6	242.5 ± 6.8	232.1 ± 4	
8 h	22.3 ± 0.4	257 ± 0.7	235.6 ± 4	
20 h	41.3 ± 2.9	348.9 ± 9.3	299.9 ± 9.6	

Table S3: monosaccharides composition from the time course of enzymatic treatment of XGO2 by LacS 2.2 U, XylS 0.1 U and $Ss\alpha Fuc$ 0.2 U

Time	Fucose (µg)	Galactose (µg)	Glucose (µg)	Xylose (μg)
T_{o}	6.2 ± 0.4	ND	2.6 ± 0.1	5.4 ± 0.6
10 min	38.2 ± 1.8	ND	4.7 ± 0.4	48.2 ± 6.8
30 min	63.7 ± 2	0.5 ± 0.1	7.9 ± 1.5	64 ± 4.6
4 h	73.5 ± 1.3	1.6 ± 0.2	15.5 ± 0.7	81.1 ± 4.2
8 h	73 ± 1.8	3.1 ± 0.1	20.8 ± 0.1	86.7 ± 3.7
20 h	75.5 ± 5	6.6 ± 1	34.7 ± 5.8	115 ± 13