

ETHANOL PRECIPITATION ASSESSMENT

DATA

Sample	V extract (ml)	V ethanol 95% (v/v) (ml)	V ethanol 100% (v/v) (ml)	Ethanol %	m (mg)
95 %	2.000	36.100	34.295	94.490	> 47.000
80 %	2.000	7.600	7.220	78.308	39.900
60 %	2.000	2.850	2.708	57.515	15.300
40 %	2.000	1.568	1.490	42.687	< 10.000
15 %	2.000	0.334	0.317	13.693	< 10.000

RESULTS IN PERCENTAGE

	Ara		Gal		Glc		Xyl		Sugars	Outros
	mono	oligo	mono	oligo	mono	oligo	mono	oligo		
60%-a	0.099	10.117	0.000	1.111	0.616	3.206	0.000	36.123	51.272	48.728
80%-a	0.049	10.716	0.000	1.073	0.360	8.467	0.000	33.882	54.547	45.453
95%-a	0.032	8.005	0.000	0.763	0.306	13.190	0.000	24.351	46.647	53.353
60%-b	0.101	0.000	0.000	0.000	0.647	0.000	0.000	0.000	0.749	99.251
80%-b	0.048	10.925	0.000	1.068	0.353	8.294	0.057	34.015	54.761	45.239
95%-b	0.019	9.536	0.000	0.935	0.239	16.227	0.000	28.748	55.703	44.297
60%-c	0.111	0.000	0.000	0.000	0.705	0.000	0.000	0.000	0.816	99.184
80%-c	0.051	4.544	0.000	0.391	0.395	3.889	0.000	13.543	22.814	77.186
95%-c	0.031	9.044	0.000	0.879	0.316	15.296	0.000	28.512	54.078	45.922

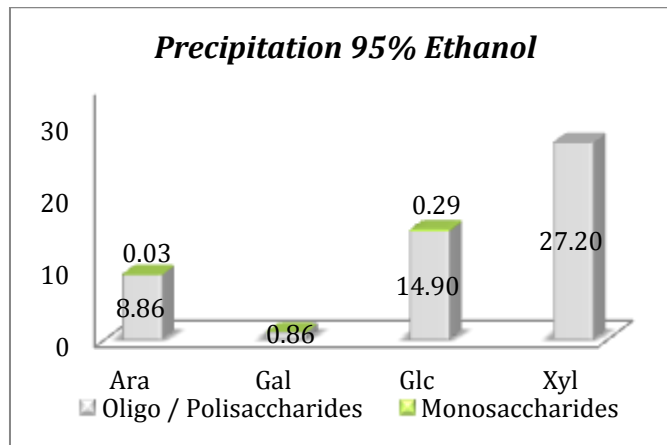
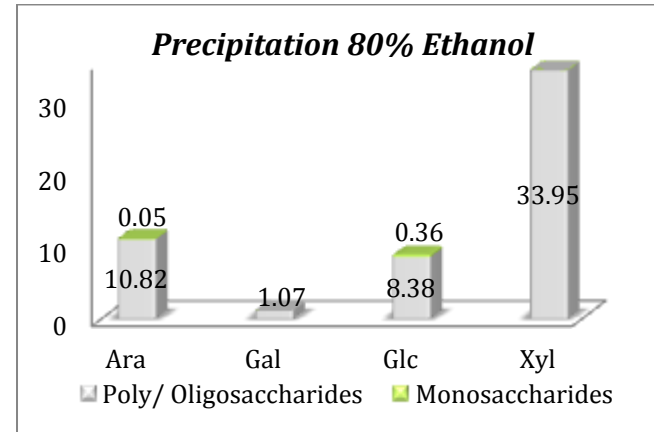
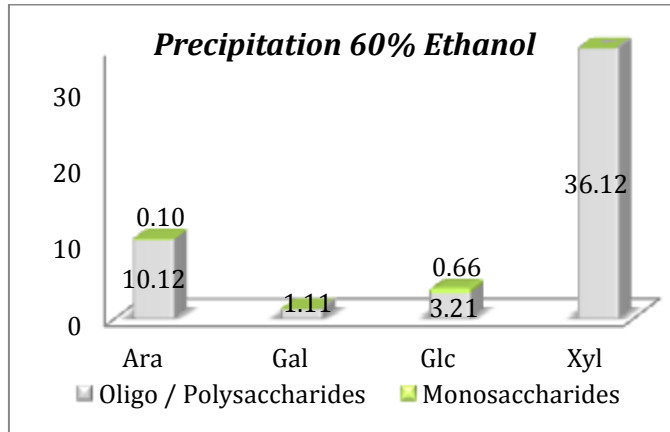
Mono= monosaccharides, Oligo= oligo/polysaccharides, Sugars=sum of all analysed sugars

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INDIVIDUAL RESULTS (IN PERCENTAGE)

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(Y axis: percentage; X axis: components)

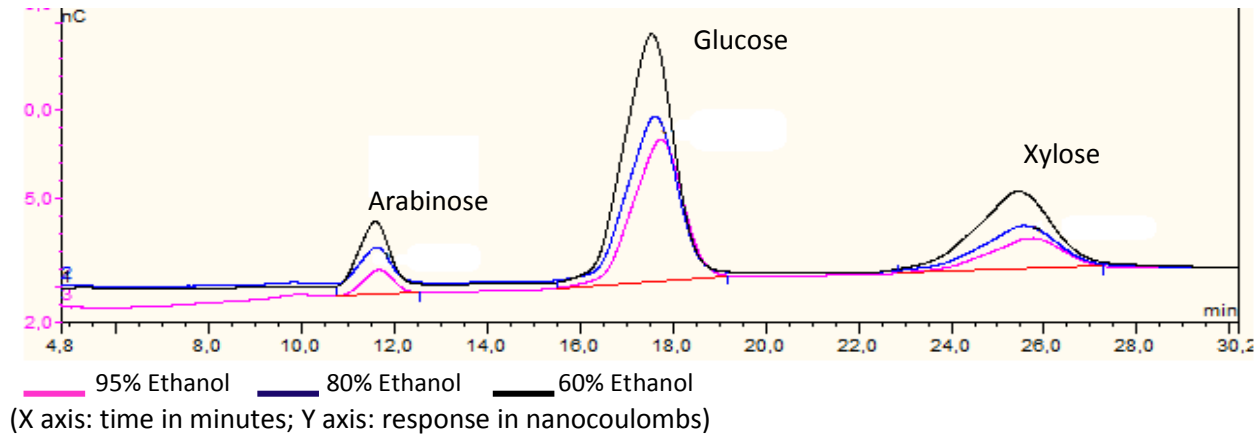


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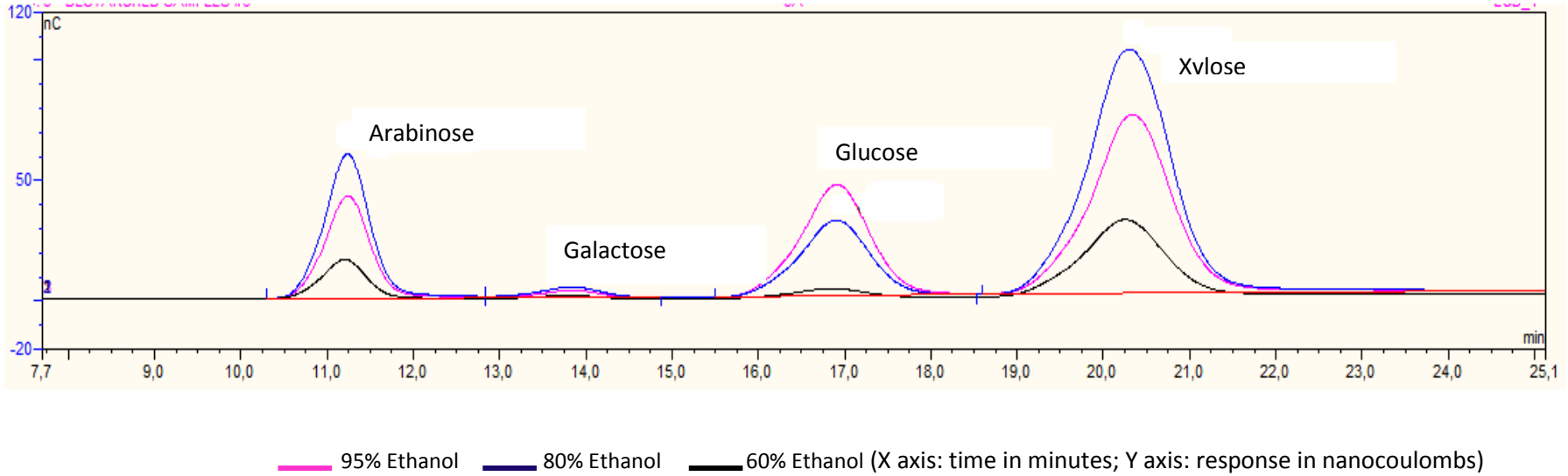
CHROMATOGRAMS

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MONOSACCHARIDES



OLIGO / POLYSACCHARIDES



OPA METHOD

PEPSIN ASSAY

OD values using BSA as substrate

Samples	Absorbance ( $\lambda=340\text{nm}$ )				
	A		B		average
	1	2	1	2	
V Pepsin ( $\mu\text{L}$ )					
0	0.246	0.234	0.250	0.251	0.245
40	0.298	0.272	0.276	0.293	0.285
80	0.309	0.329	0.330	0.310	0.320
120	0.339	0.345	0.365	0.347	0.349
160	0.378	0.404	0.412	0.416	0.403
200	0.449	0.422	0.448	0.453	0.443
Serine blank	0.218	0.237	0.219	0.241	0.229
Serine Std	0.947	0.936	0.938	0.936	0.939

OD values using both BSA and rye bran as substrate

Samples	Absorbance ( $\lambda=340\text{nm}$ )				
	A		B		average
	1	2	1	2	
V Pepsin ( $\mu\text{L}$ )					
0	0.670	0.641	0.678	0.661	0.663
50	0.703	0.684	0.670	0.683	0.685
100	0.716	0.689	0.720	0.714	0.710
150	0.701	0.731	0.736	0.726	0.724
200	0.717	0.743	0.713	0.729	0.726
250	0.738	0.730	0.733	0.733	0.734
Serine blank	0.226	0.190	0.220	0.207	0.211
Serine Std	0.927	0.920	0.940	0.931	0.930

OD values and DH results using rye bran as pepsin substrate

Samples	Absorbance ( $\lambda=340\text{nm}$ )					Degree of Hydrolysis		
	A		B		average	Serine-NH <sub>3</sub>	h	DH (%)
	1	2	1	2				
V Pepsin ( $\mu\text{L}$ )								
0	0.604	0.605	0.639	0.630	0.620	0.499	0.162	2.077
100	0.645	0.640	0.669	0.647	0.650	0.529	0.192	2.465
200	0.657	0.650	0.682	0.673	0.666	0.543	0.207	2.657
300	0.678	0.681	0.723	0.715	0.699	0.575	0.240	<b>3.082</b>
Serine blank	0.097	0.099	0.093	0.094	0.096			
Serine Std	0.807	0.828	0.807	0.662	0.776			

PANCREATIN ASSAY

OD values using BSA as substrate

Samples t (min)	Absorbance ( $\lambda=340\text{nm}$ )				
	A		B		average
	1	2	1	2	
0	0.146	0.144	0.137	0.143	0.143
10	0.222	0.248	0.23	0.252	0.238
20	0.261	0.288	0.273	0.257	0.270
30	0.281	0.292	0.278	0.292	0.286
40	0.288	0.307	0.292	0.284	0.293
50	0.294	0.306	0.293	0.320	0.303
60	0.319	0.319	0.303	0.314	0.314
Serine blank	0.073	0.072	0.071	0.075	0.073
Serine Std	0.724	0.729	0.777	0.784	0.754

OD values and DH results using rye bran as pancreatin substrate

Samples t (min)	Absorbance ( $\lambda=340\text{nm}$ )					Degree of Hydrolysis		
	A		B		average	Serine-NH <sub>3</sub>	h	DH (%)
	1	2	1	2				
0	0.233	0.245	0.236	0.234	0.237	0.137	0.211	-2.707
10	0.489	0.480	0.472	0.474	0.479	0.359	0.018	0.234
20	0.498	0.692	0.685	0.693	0.642	0.510	0.173	2.221
30	0.680	0.753	0.706	0.781	0.730	0.591	0.256	3.291
40	0.747	0.792	0.762	0.780	0.770	0.628	0.294	3.781
50	0.761	0.811	0.777	0.828	0.794	0.650	0.317	4.073
60	0.791	0.838	0.805	0.856	0.823	0.676	0.344	4.417
70	0.862	0.926	0.850	0.936	0.894	0.741	0.411	5.281
80	0.881	0.906	0.868	0.937	0.898	0.745	0.416	<b>5.335</b>
Serine blank	0.089	0.088	0.087	0.088	0.088			
Serine Std	0.844	0.771	0.784	0.770	0.792			