

Table 1. Summary of oligosaccharides identified in Whatman 42 paper artificially aged in an oven at 90°C and 50% RH using ESI-MS

ESI-MS			144	840	26856
Peaks observed		Unaged	hours	hours	hours
<i>m/z</i>					
Sodium adducts					
365	cellobiose	X	X	X	X
527	cellotriose	X	X	X	X
689	cellotetraose	X	X	X	X
851	cellopentaose	X	X	X	X
1013	cellohexaose	X	X	X	X
1175	celloheptaose			X	X
1337	cellooctaose			X	X
1499	cellononaose				X
Sodium-bound dimers					
707	cellobiose-cellobiose	X	X	X	X
869	cellobiose-cellotriose	X	X	X	X
1031	cellobiose-cellotetraose	X	X	X	X
	cellotriose-cellotriose	X	X	X	X
1193	cellotriose-cellotetraose	X	X	X	X
1355	cellotetraose-cellotetraose	X	X	X	X
	cellotriose-cellopentaose	X	X	X	X
1517	cellotetraose-cellopentaose			X	X
1679	cellopentaose-cellopentaose				X

Table 2. Summary of oligosaccharides identified in Whatman 42 paper artificially aged in an oven at 90°C and 50% RH using DESI-MS

DESI-MS					
Peaks observed		Unaged	144 hours	840 hours	26856 hours
Sodium adducts					
365	cellobiose	X	X	X	X
527	cellotriose	X	X	X	X
689	cellotetraose	X	X	X	X
851	cellopentaose	X	X	X	X
1013	cellohexaose			X	X
1175	celloheptaose			X	X
1337	cellooctaose				X
1499	cellononaose				X
1662	cellodecaose				X
Sodium-bound dimers					
707	cellobiose-cellobiose	X		X	X
869	cellobiose-cellotriose			X	X
1031	cellobiose-cellotetraose			X	X
	cellotriose-cellotriose			X	X
1193	cellotriose-cellotetraose			X	
1355	cellotetraose-cellotetraose				
1517	cellotetraose-cellopentaose				
1679	cellopentaose-cellopentaose				
Potassium adducts					
381	cellobiose	X	X	X	X
543	cellotriose	X		X	X

Table 3. Summary of oligosaccharides identified in Whatman 42 paper artificially aged in an oven at 90°C and 50% RH using LAESI-MS

LAESI-MS					
Peaks observed		Unaged	144 hours	840 hours	26856 hours
Potassium adducts					
219	glucose		X	X	X
381	cellobiose	X	X	X	X
543	cellotriose		X	X	X
705	cellotetraose		X	X	X
867	cellopentaose			X	X
1029	cellohexaose				X
1191	celloheptaose				X
1353	cellooctaose				X
Sodium adducts					
365	cellobiose				X