

Valorisation of blackcurrant pomace by extraction of pectin rich fractions – structural characterization and evaluation as multifunctional cosmetic ingredient

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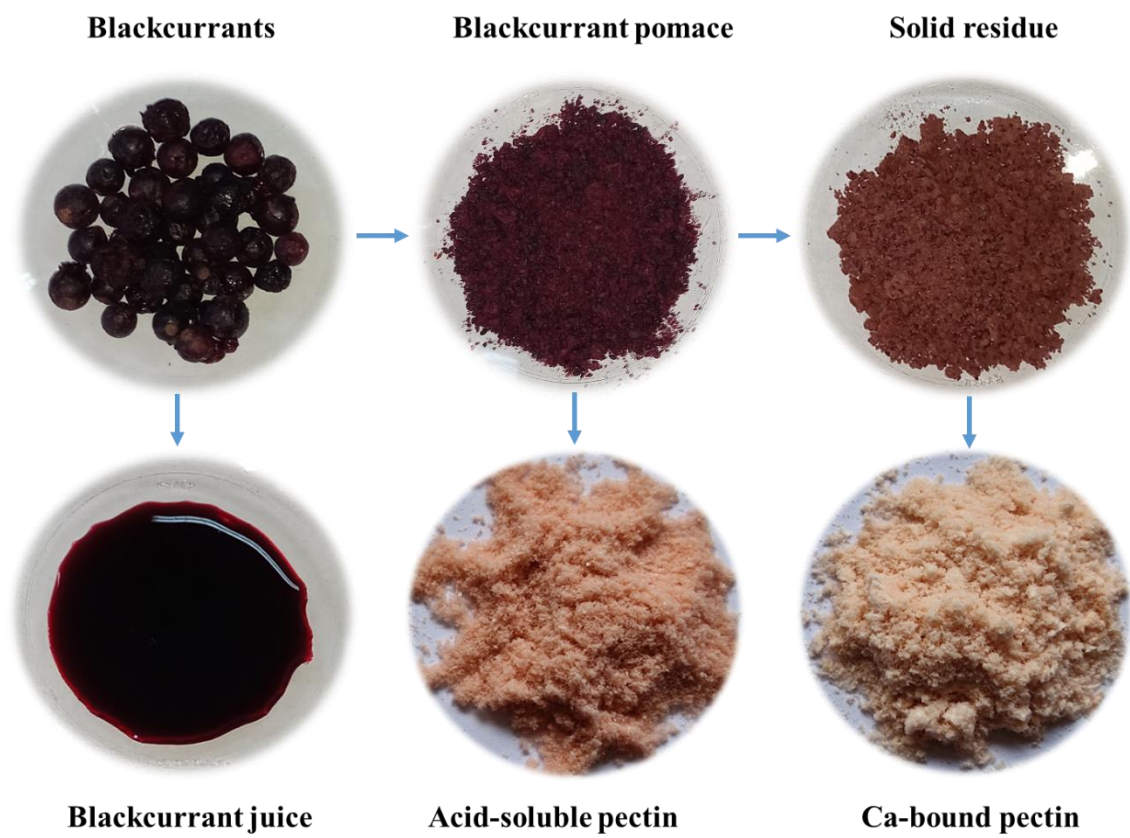
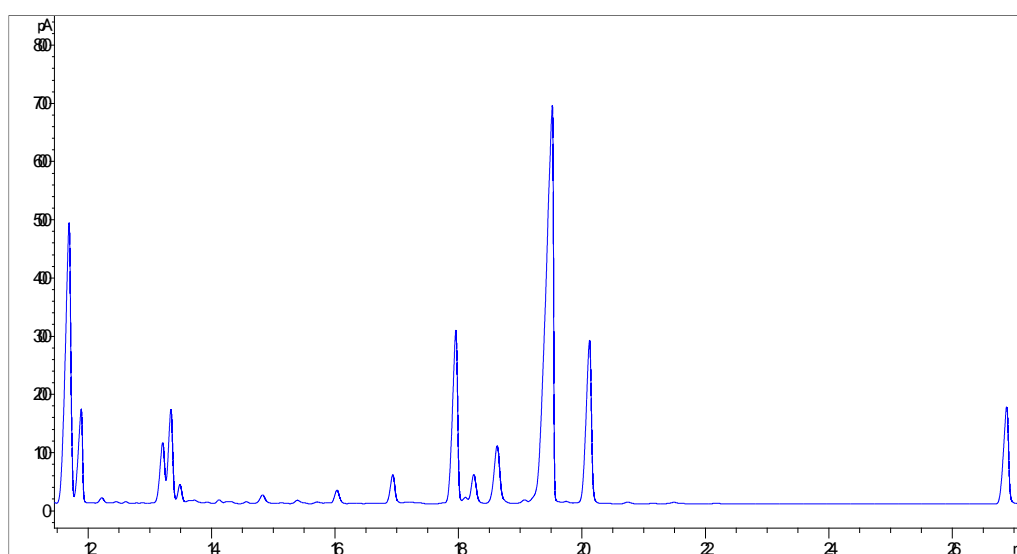
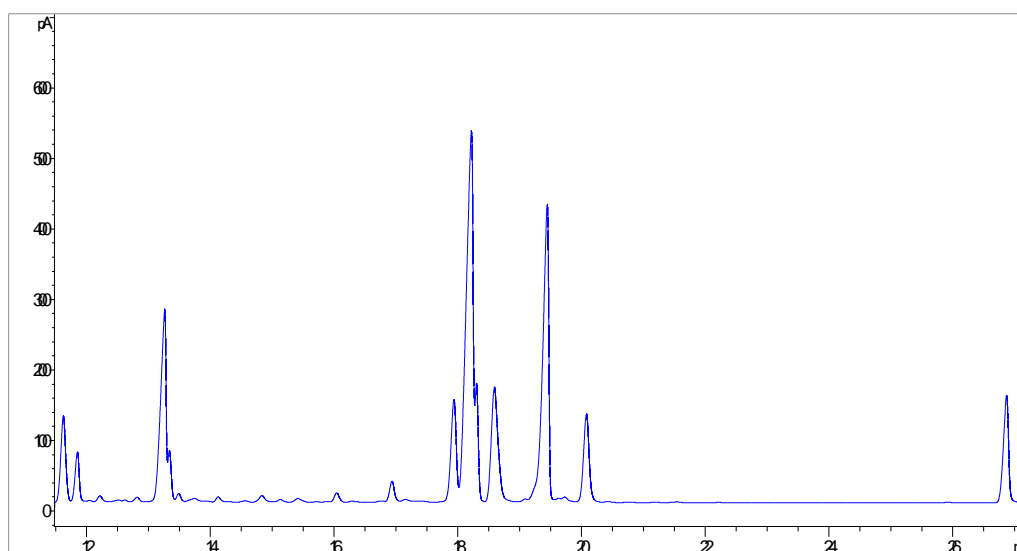


Figure S1. Photographs of different fractions obtained during pectin rich fractions isolation.



(a)



(b)

Figure S2. Representative GC-FID chromatograms of acid soluble (CAP, a) and Ca-bound (AOP, b) pectin rich fractions monosaccharide composition obtained after complete hydrolysis.

Table S1. Results of a two-tailed Student's t-test of acid soluble (CAP) and Ca-bound (AOP) pectin rich fractions influence on *S. epidermidis* strains growth compared to control sample without supplementation.

a) P values for <i>S. epidermidis</i> DSM 20044 and CAP							
Time	0.0625 mg /mL	0.125 mg/mL	0.25 mg/mL	0.5 mg/mL	1 mg/mL	2 mg/mL	4 mg/mL
2 h	0.015	0.028	0.013	0.027	0.019	0.024	0.030
3 h	0.016	0.026	0.015	0.027	0.032	0.038	0.044
4 h	0.200	0.096	0.018	0.024	0.017	0.025	0.035
5 h	0.254	0.030	0.010	0.023	0.014	0.023	0.032
6 h	0.039	0.023	0.014	0.026	0.016	0.025	0.033
7 h	0.557	0.019	0.009	0.020	0.021	0.032	0.033
8 h	0.044	0.030	0.013	0.024	0.026	0.035	0.036
9 h	0.061	0.034	0.014	0.025	0.028	0.036	0.037
10 h	0.179	0.071	0.048	0.055	0.060	0.067	0.065
22 h	0.049	0.051	0.037	0.045	0.045	0.054	0.045
24 h	0.053	0.054	0.031	0.037	0.038	0.047	0.038

b) P values for <i>S. epidermidis</i> DSM 20044 and AOP							
Time	0.0625 mg /mL	0.125 mg/mL	0.25 mg/mL	0.5 mg/mL	1 mg/mL	2 mg/mL	4 mg/mL
2 h	0.035	0.042	0.046	0.041	0.042	0.033	0.027
3 h	0.037	0.042	0.045	0.043	0.043	0.035	0.028
4 h	0.287	0.543	0.064	0.052	0.049	0.037	0.234
5 h	0.046	0.050	0.051	0.052	0.050	0.042	0.052
6 h	0.048	0.051	0.057	0.053	0.052	0.044	0.056
7 h	0.053	0.056	0.061	0.056	0.055	0.047	0.062
8 h	0.036	0.040	0.048	0.045	0.045	0.036	0.068
9 h	0.019	0.024	0.032	0.032	0.032	0.023	0.059
10 h	0.042	0.046	0.054	0.052	0.052	0.042	0.076
22 h	0.332	0.197	0.345	0.161	0.059	0.037	0.543
24 h	0.384	0.316	0.467	0.227	0.130	0.061	0.745

c) P values for <i>S. epidermidis</i> ATCC 12228 and CAP							
Time	0.0625 mg /mL	0.125 mg/mL	0.25 mg/mL	0.5 mg/mL	1 mg/mL	2 mg/mL	4 mg/mL
2 h	0.029	0.029	0.016	0.024	0.021	0.020	0.033
3 h	0.019	0.040	0.024	0.029	0.034	0.034	0.049
4 h	0.713	0.035	0.051	0.081	0.015	0.016	0.059
5 h	0.043	0.035	0.019	0.026	0.011	0.010	0.031
6 h	0.064	0.022	0.018	0.026	0.014	0.018	0.032
7 h	0.923	0.024	0.030	0.024	0.020	0.024	0.033
8 h	0.615	0.049	0.033	0.031	0.030	0.028	0.037
9 h	0.818	0.214	0.293	0.044	0.028	0.028	0.039
10 h	0.735	0.223	0.128	0.079	0.062	0.059	0.056
22 h	0.167	0.136	0.132	0.053	0.045	0.045	0.049
24 h	0.104	0.116	0.109	0.044	0.037	0.038	0.042

d) P values for <i>S. epidermidis</i> ATCC 12228 and AOP							
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Time	0.0625 mg /mL	0.125 mg/mL	0.25 mg/mL	0.5 mg/mL	1 mg/mL	2 mg/mL	4 mg/mL
2 h	0.029	0.015	0.009	0.029	0.048	0.008	0.008
3 h	0.077	0.206	0.118	0.044	0.182	0.218	0.073
4 h	0.296	0.666	0.859	0.120	0.470	0.044	0.024
5 h	0.272	0.095	0.076	0.836	0.684	0.026	0.019
6 h	0.076	0.061	0.059	0.466	0.812	0.045	0.024
7 h	0.054	0.041	0.051	0.156	0.560	0.084	0.052
8 h	0.061	0.057	0.063	0.160	0.867	0.055	0.031
9 h	0.050	0.044	0.045	0.233	0.565	0.047	0.042
10 h	0.079	0.079	0.064	0.414	0.877	0.067	0.042
22 h	0.090	0.070	0.061	0.376	0.803	0.071	0.075
24 h	0.100	0.086	0.062	0.370	0.749	0.998	0.100

d) P values for *S. aureus* MRSA and AOP

Time	0.0625 mg /mL	0.125 mg/mL	0.25 mg/mL	0.5 mg/mL	1 mg/mL	2 mg/mL	4 mg/mL
2 h	0.092	0.038	0.033	0.612	0.152	0.071	0.042
3 h	0.083	0.041	0.037	0.042	0.349	0.608	0.966
4 h	0.041	0.036	0.032	0.031	0.044	0.058	0.086
5 h	0.040	0.035	0.031	0.044	0.131	0.288	0.447
6 h	0.043	0.040	0.035	0.039	0.179	0.422	0.674
7 h	0.039	0.034	0.030	0.050	0.158	0.351	0.538
8 h	0.070	0.053	0.051	0.105	0.158	0.353	0.576
9 h	0.078	0.063	0.057	0.095	0.154	0.344	0.567
10 h	0.075	0.062	0.056	0.085	0.191	0.403	0.617
22 h	0.081	0.068	0.053	0.119	0.144	0.240	0.313
24 h	0.071	0.060	0.047	0.093	0.113	0.145	0.202