

Electronic Supplementary Information

Suberin isolation process from cork using ionic liquids: characterisation of ensuing products

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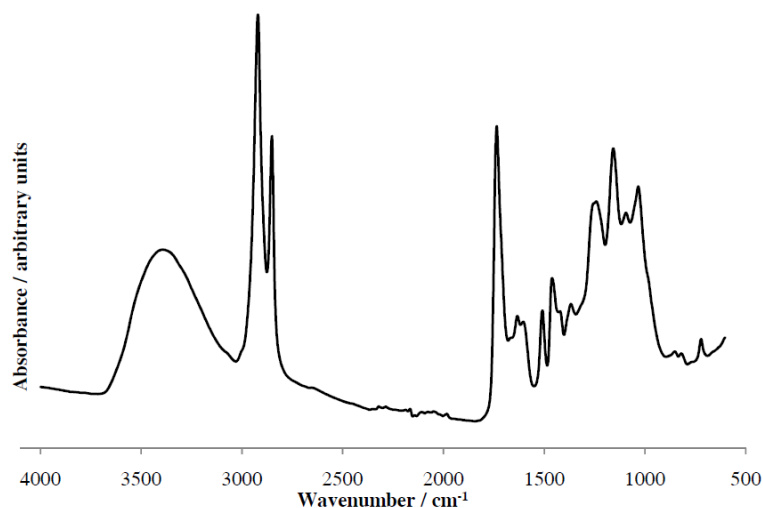
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ESI 1. ATR-FTIR spectrum and assignment of cork major compounds (control)^[4b, 4c, 7b, 26], treated under the extracted conditions (4 h at 100 °C) in the absence of ionic liquid. The underlined cork constituent represents the major contribution to the infrared band.



Wavenumber / cm ⁻¹	Description	Assignment
3395	OH stretch	water and polissacharides
2921	CH aliph. stretch	<u>suberin</u> , polissacharides and lignin
2852	CH aliph. stretch	<u>suberin</u> , polissacharides and lignin
1737	C=O stretch (ester groups)	<u>suberin</u> , polissacharides and lignin
1635	C=C stretch	suberin
1606	C=C stretch	suberin and aromatic lignin
1511	C=C stretch	aromatic <u>lignin</u> (Guaiacyl-type)
1460	CH asym. deformation	suberin, polissacharides and lignin
1424	C-C stretch in the ring	small amount of aromatic ring Guaiacyl-type lignin
1366	CH sym. deformation	suberin, polissacharides and lignin
1242	CO stretch	<u>suberin</u> , polissacharides and lignin
1158	CO asym. stretch	<u>suberin</u> , polissacharides and lignin
1092	CH, CO deformation	<u>polissacharides</u> and lignin
1034	CH, CO deformation	<u>polissacharides</u> and lignin
855	CH out-of-plane deformation	aromatic ring Guaiacyl-type <u>lignin</u>
819	CH out-of-plane bending	aromatic ring Guaiacyl-type <u>lignin</u>
724	CH out-of-plane deformation (R ₁ CH=CHR ₂ groups)	<u>suberin</u>

ESI 2. NMR spectra (800 MHz, 25 °C) of the suberinic material fraction soluble in deuterated trichloromethane: a) ^{13}C NMR, b) COSY, c) HSQC and d) HMBC.

