# SUPPORTING INFORMATION

# Furylated flavonoids: biobased building blocks produced by condensed tannins depolymerization

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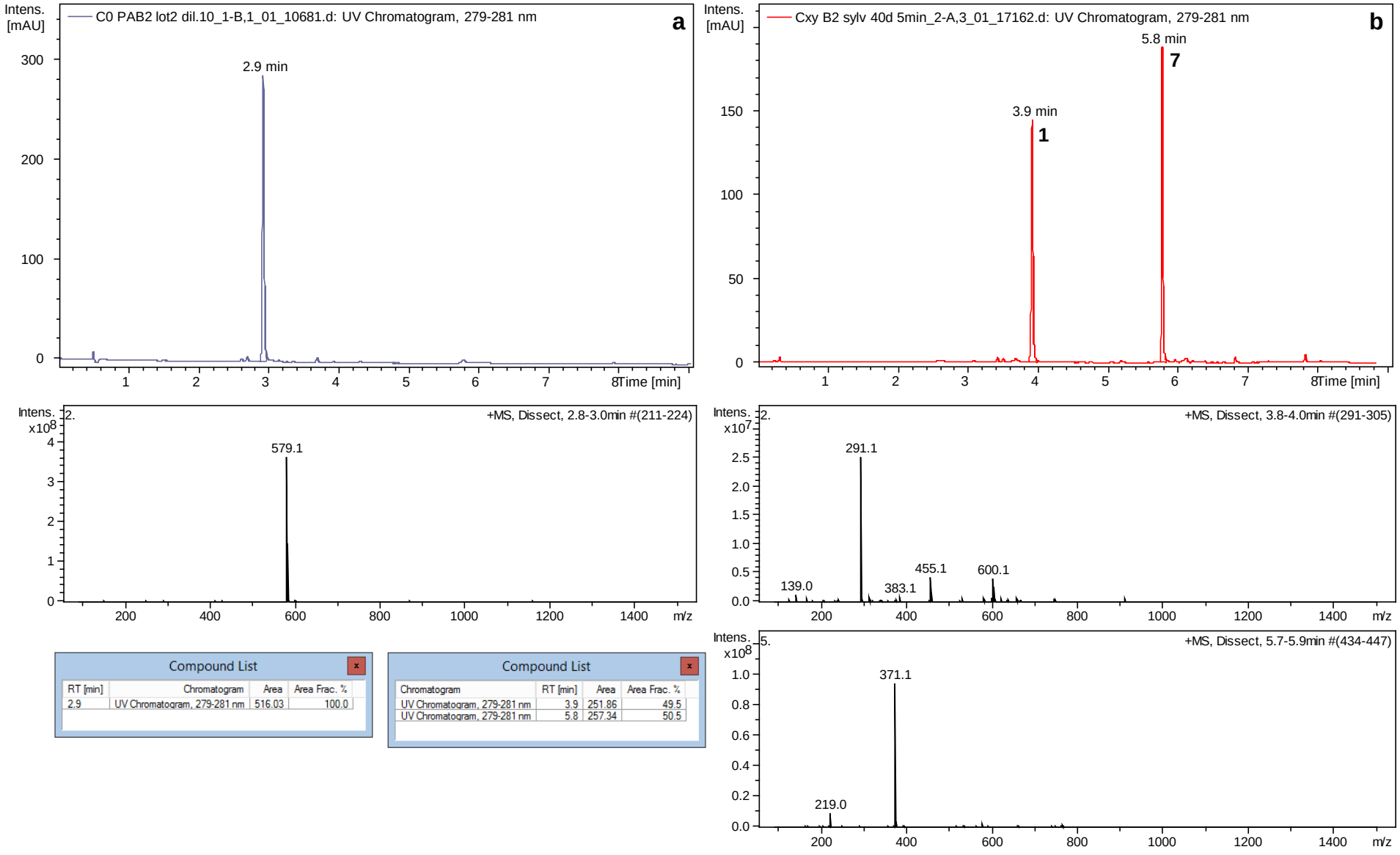
Number of figures : 6




**Figures S1.** UV chromatograms at 280 nm and matching MS(+) spectra of integrated peaks of procyanidin B2 at 0 min (a) and products after 10 min of complete B2 sylvanolysis at 40°C (b). The peak area are displayed in the tables referred to as “Compound List”.

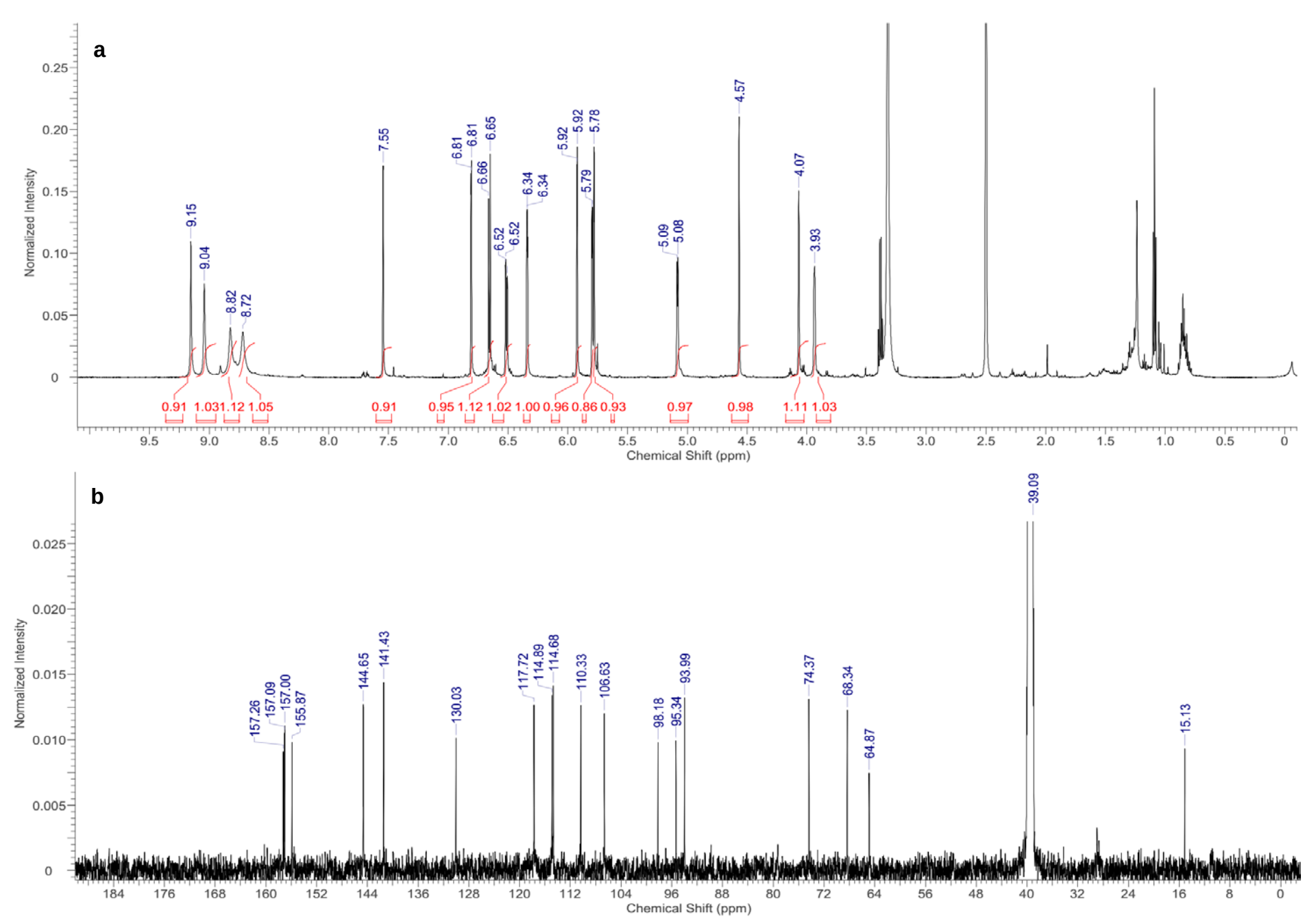
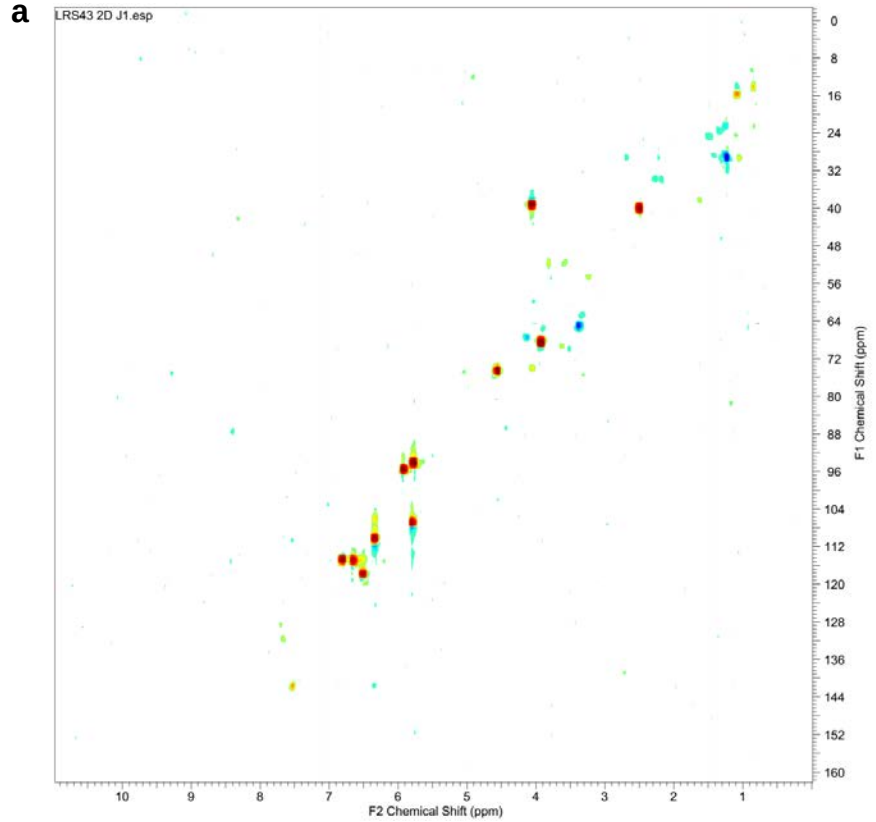
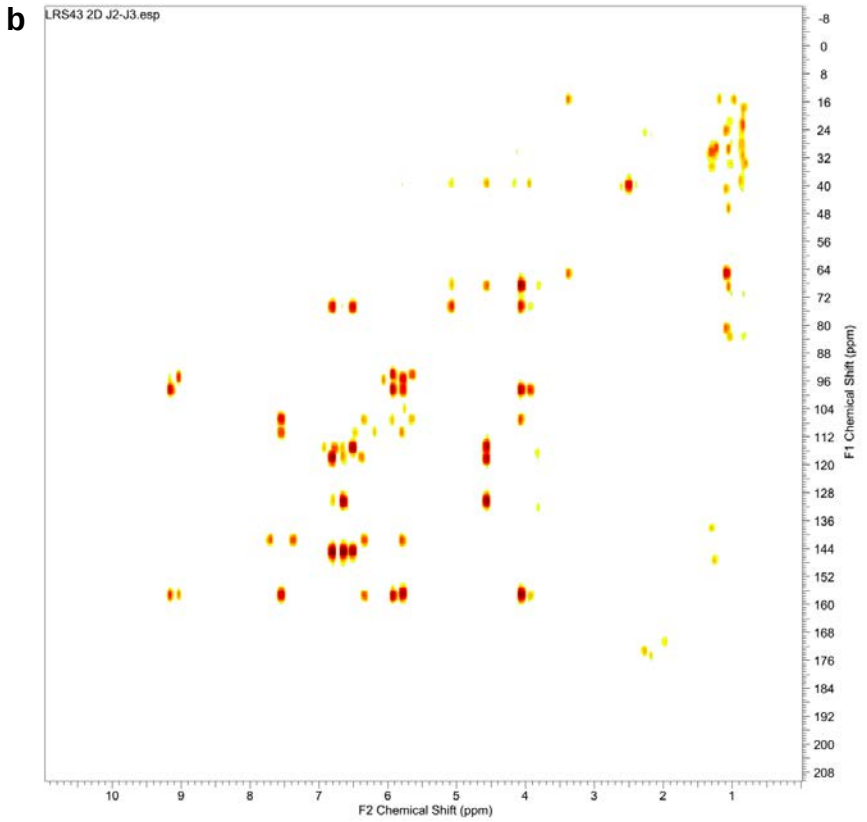



**Figure S2.** (a) $^{1}H$ and (b) $^{13}C$ NMR chemical shifts of 4-(furan-2-yl)-(epi)catechin **(5)**.

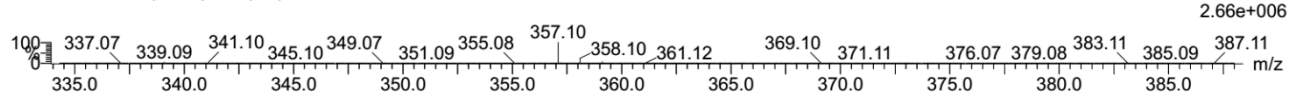



c

Monoisotopic Mass, Even Electron Ions
863 formula(e) evaluated with 2 results within limits (up to 20 closest results for each mass)
Elements Used:
C: 1-150 H: 1-200 N: 0-30 O: 0-50

SYNAPT G2-S#UEB205 LS108 23-Feb-2015
Y-HF15022302 4 (0.155) Cm (1:5) 1: TOF MS ES+
2.66e+006




| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Minimum: | | | | -1.5 | | | | |
| Maximum: | | 1.0 | 1.0 | 50.0 | | | | |
| Mass | Calc. Mass | mDa | PPM | DBE | i-FIT | Norm | Conf(%) | Formula |
| 357.0976 | 357.0974 | 0.2 | 0.6 | 11.5 | 1855.8 | 0.004 | 99.55 | C19 H17 O7 |
| | 357.0979 | -0.3 | -0.8 | 4.5 | 1861.2 | 5.408 | 0.45 | C4 H13 N12 O8 |

**Figure S3.** (a) HSQC-DEPT, (b) HMBC and (c) HMRS spectra of 4-(furan-2-yl)-(epi)catechin **(5)**

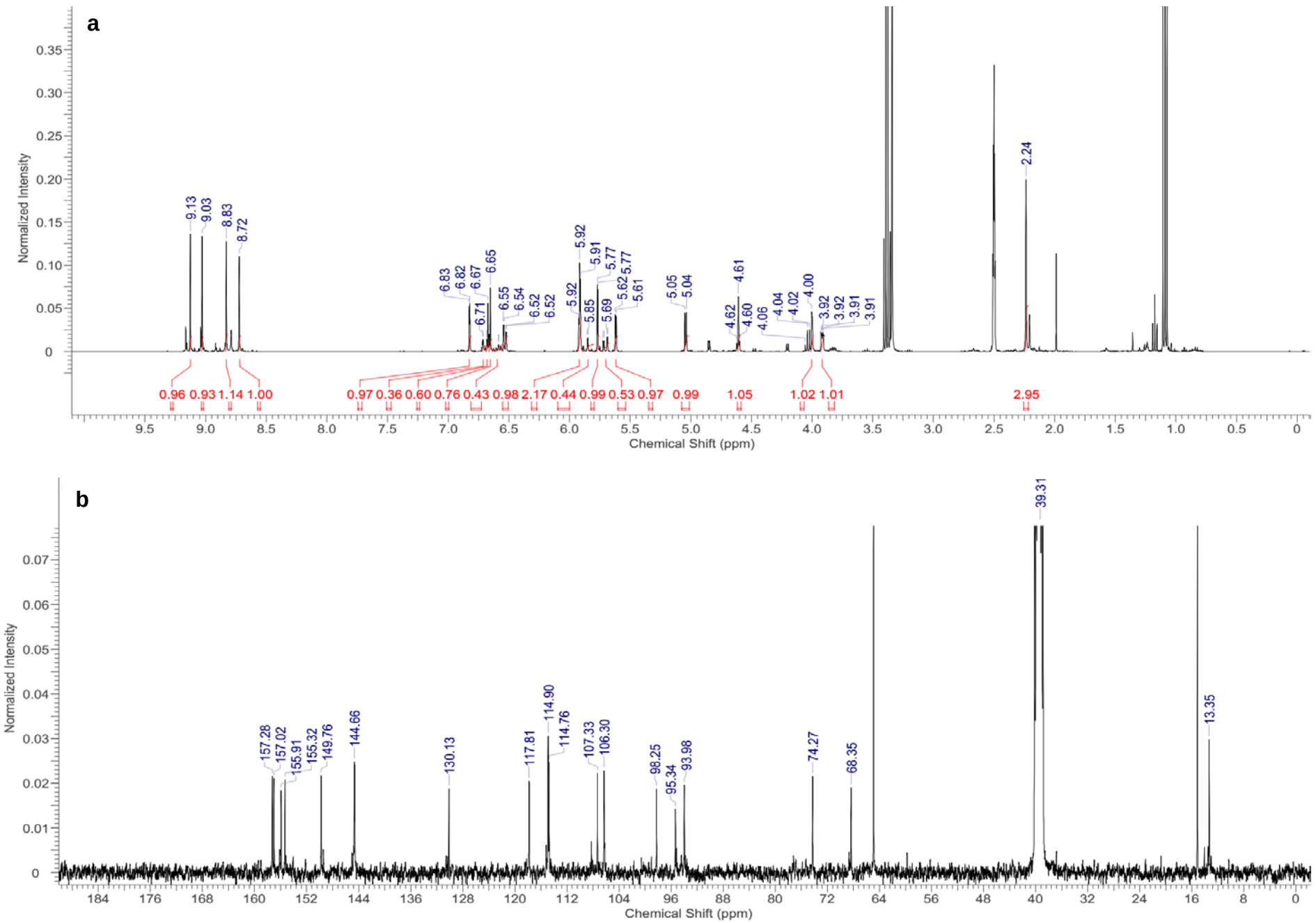
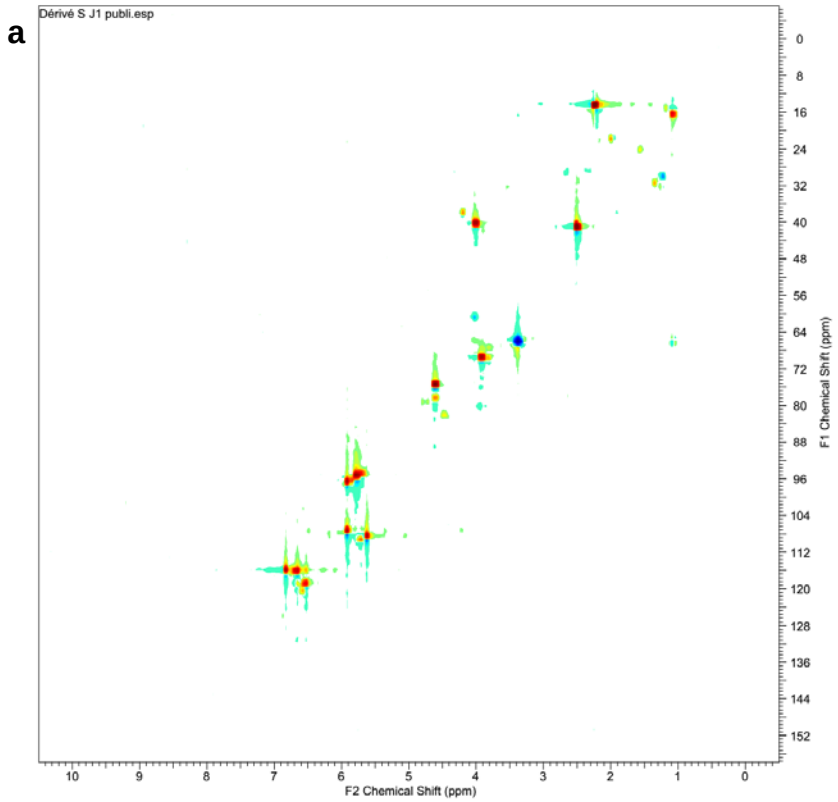
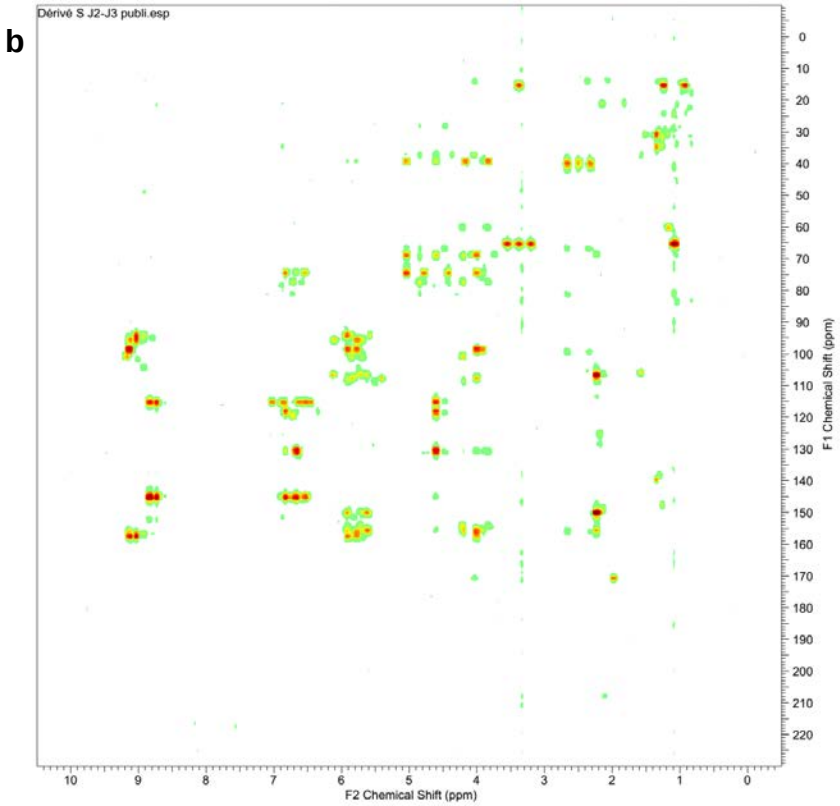



**Figure S4.** (a) $^{1}H$ and (b) $^{13}C$ NMR chemical shifts of 4-(5-methylfuran-2-yl)-(epi)catechin **(7)**.



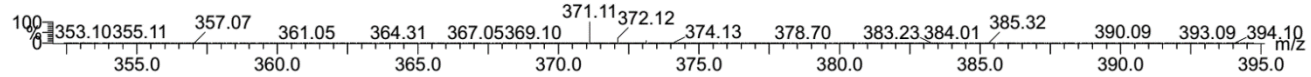

c

Monoisotopic Mass, Even Electron Ions
79 formula(e) evaluated with 1 results within limits (up to 20 closest results for each mass)
Elements Used:
C: 1-100 H: 1-150 O: 1-50

SYNAPT G2-S#NotSet
Y-HF14060301 53 (0.970)

LR

03-Jun-2014
1: TOF MS ES+
1.52e+005




| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Minimum: | | | | -5.0 | | | | |
| Maximum: | | 1.0 | 1.0 | 50.0 | | | | |
| Mass | Calc. Mass | mDa | PPM | DBE | i-FIT | Norm | Conf(%) | Formula |
| 371.1128 | 371.1131 | -0.3 | -0.8 | 11.5 | 1243.2 | n/a | n/a | C20 H19 O7 |

**Figure S5.** (a) HSQC-DEPT, (b) HMBC and (c) HMRS spectra of 4-(5-methylfuran-2-yl)-(epi)catechin **(7)**.

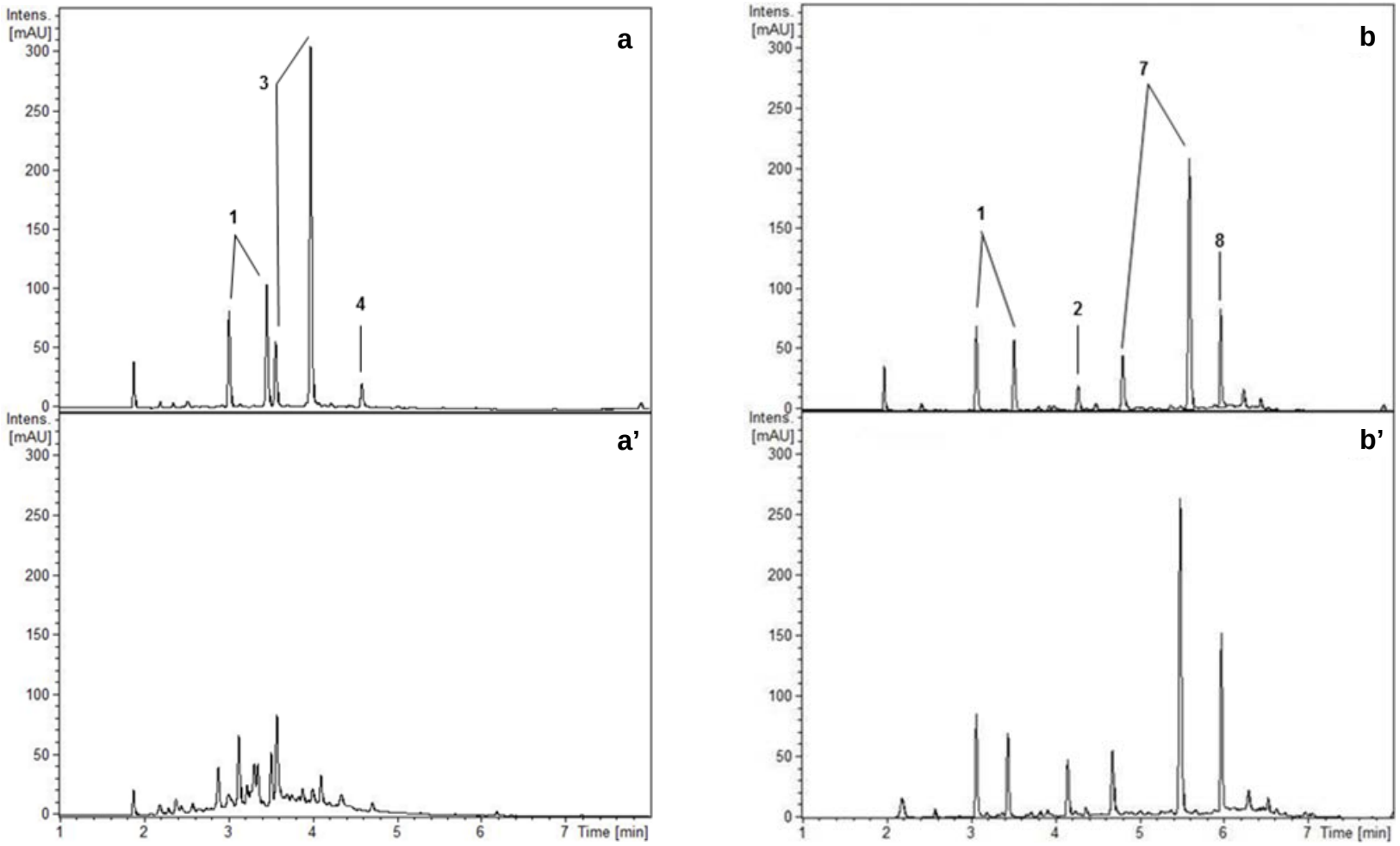



**Figure S6**. UV chromatograms at 280 nm of the isolated products from tannin preparative mercaptolysis (left) and sylvanolysis (right) before (a and b, respectively) and after (a' and b', respectively) 19 h at RT in borate buffer, pH 9.0, showing the low stability of the mercaptolysis products and the high stability of the furylated derivatives