Supporting information

for

Conserved and species-specific oxylipin pathways in the wound-activated chemical defense of the noninvasive red alga *Gracilaria chilensis* and the invasive *Gracilaria vermiculophylla*

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Spectra for metabolites 5 and 6.

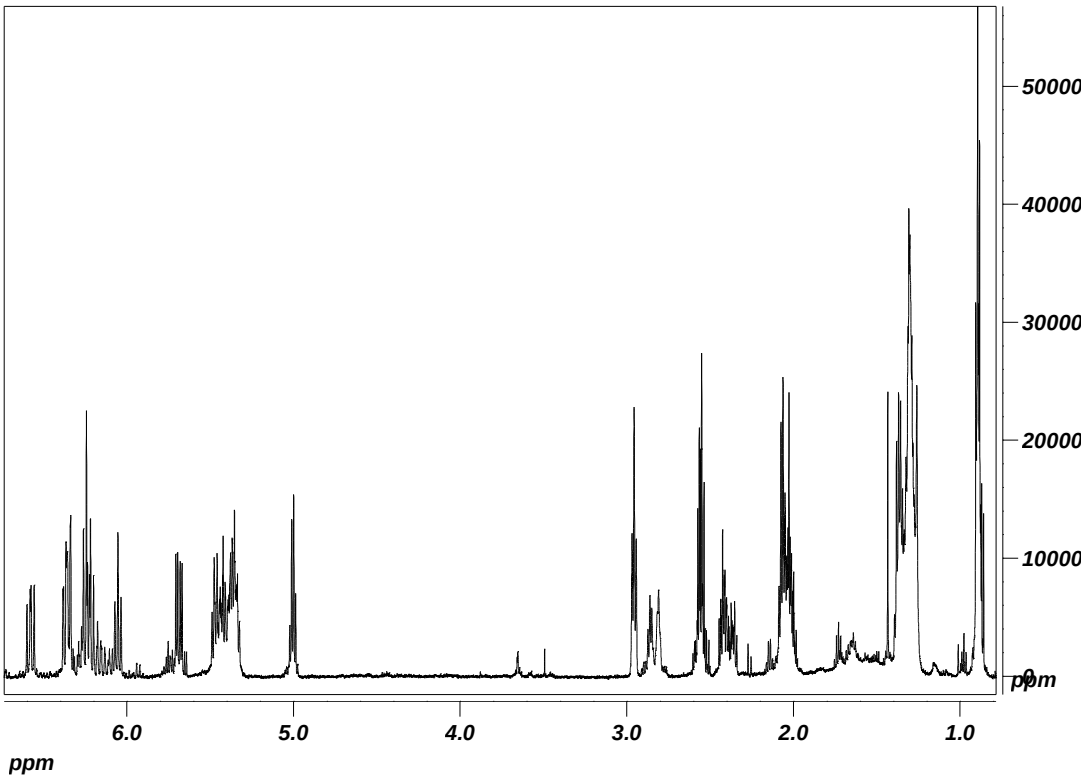

Figure S1: ^{1}H NMR spectrum of compound **5**.

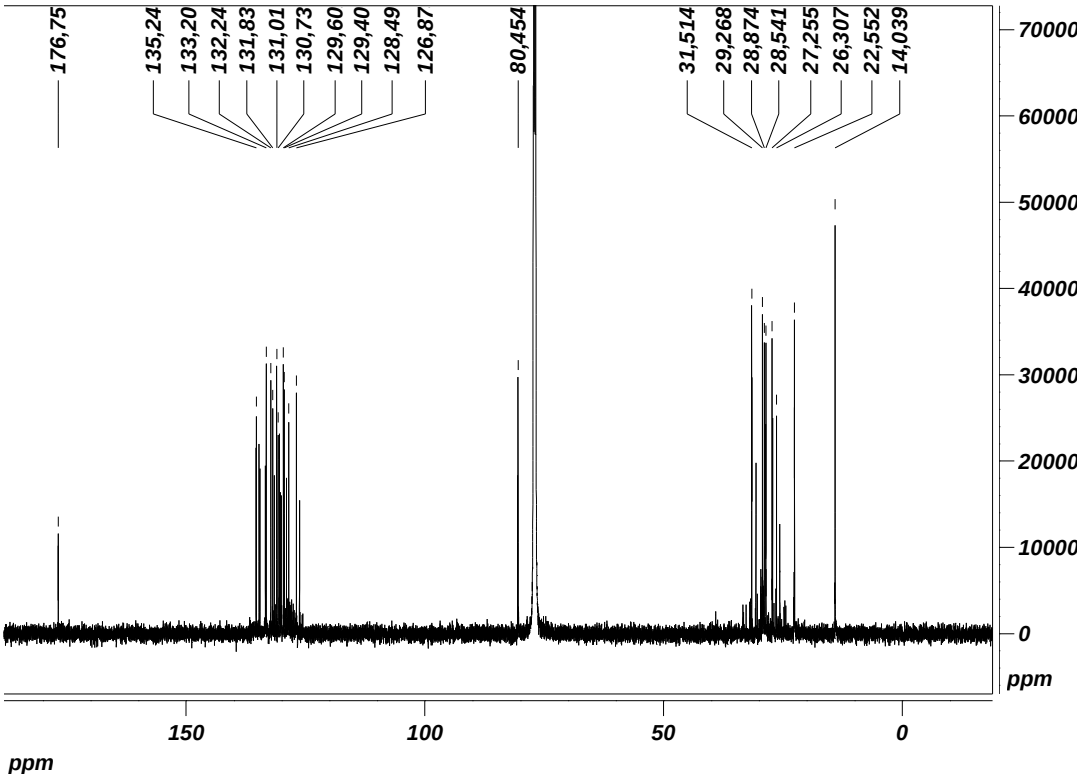

Figure S2: ^{13}C NMR spectrum of compound **5**.

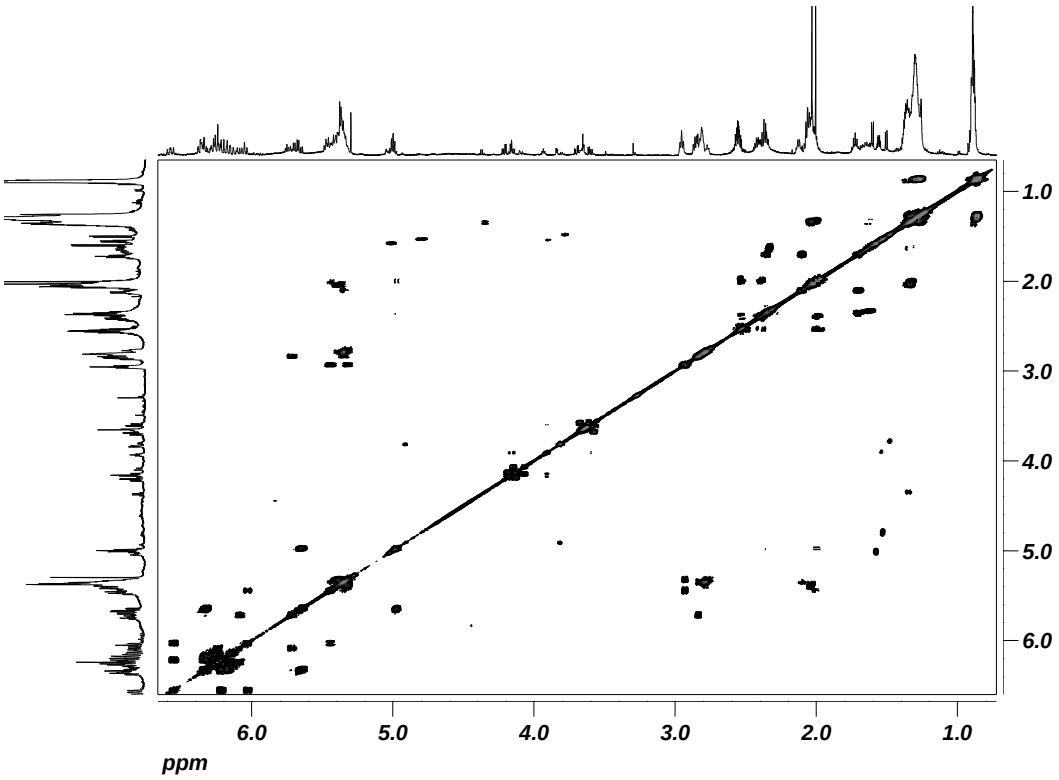

Figure S3: $^{1}H/^{1}H$-COSY spectrum of compound **5**.

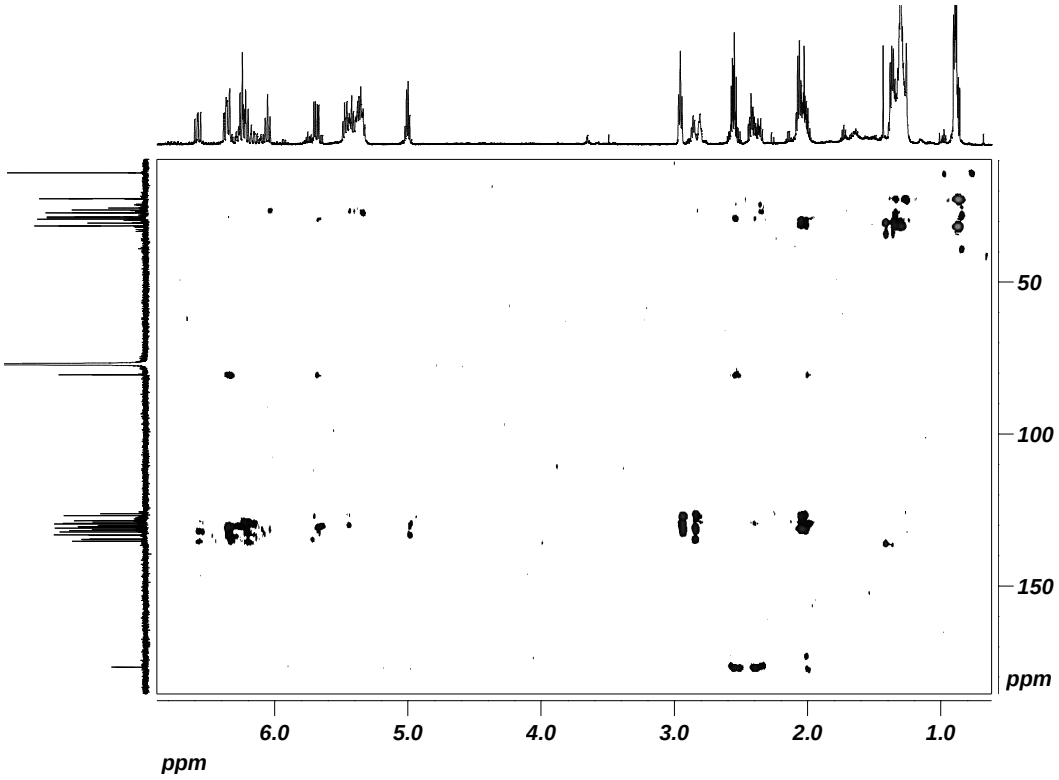

Figure S4: HMBC spectrum of compound **5**.

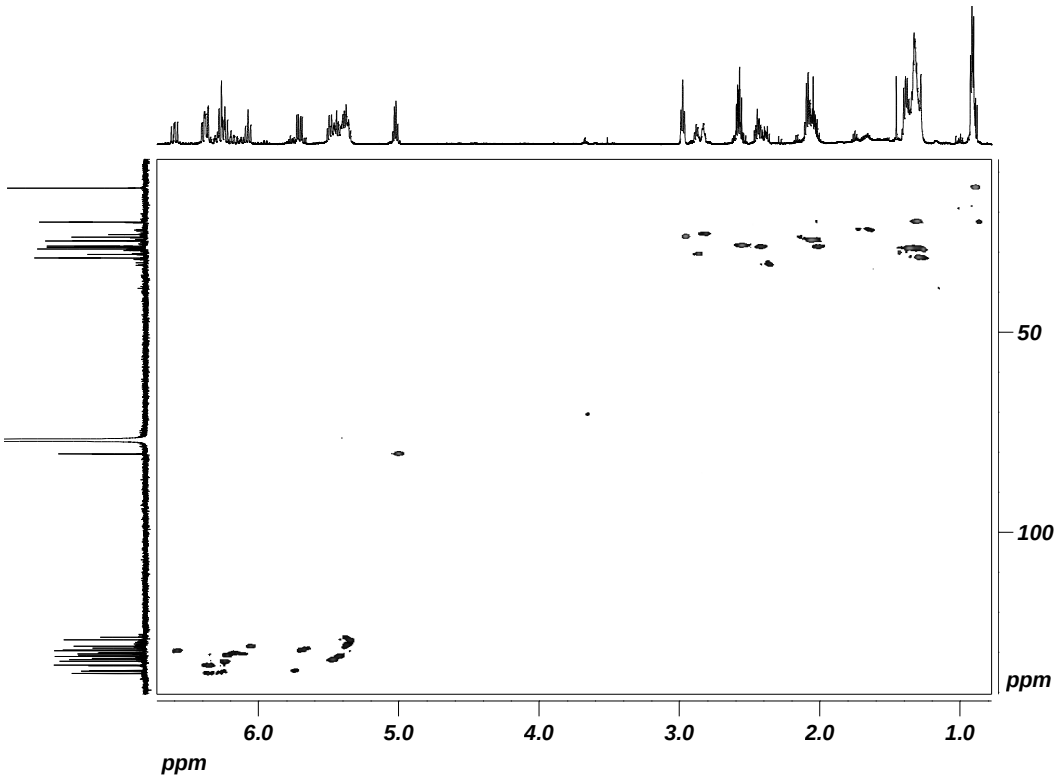

Figure S5: HSQC spectrum of compound **5**.

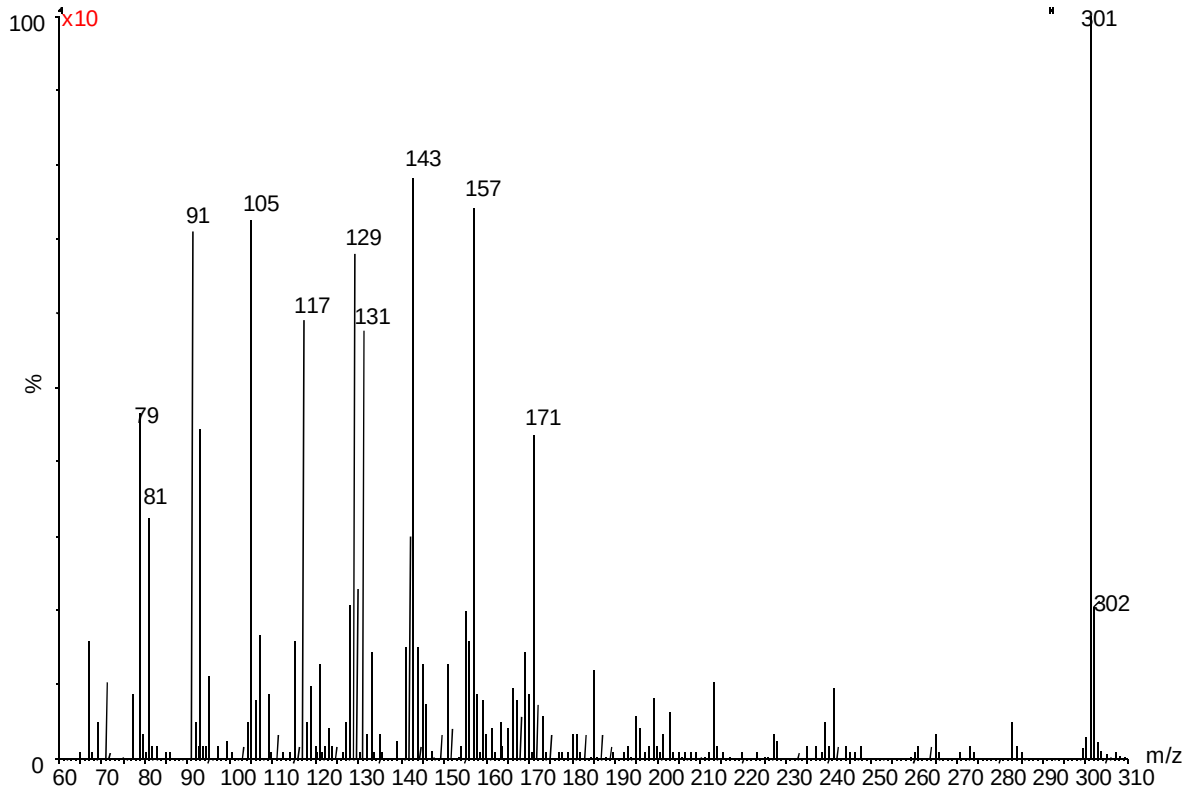

Figure S6: ESI-MS/MS spectrum of compound **5** (target mass 301 amu).

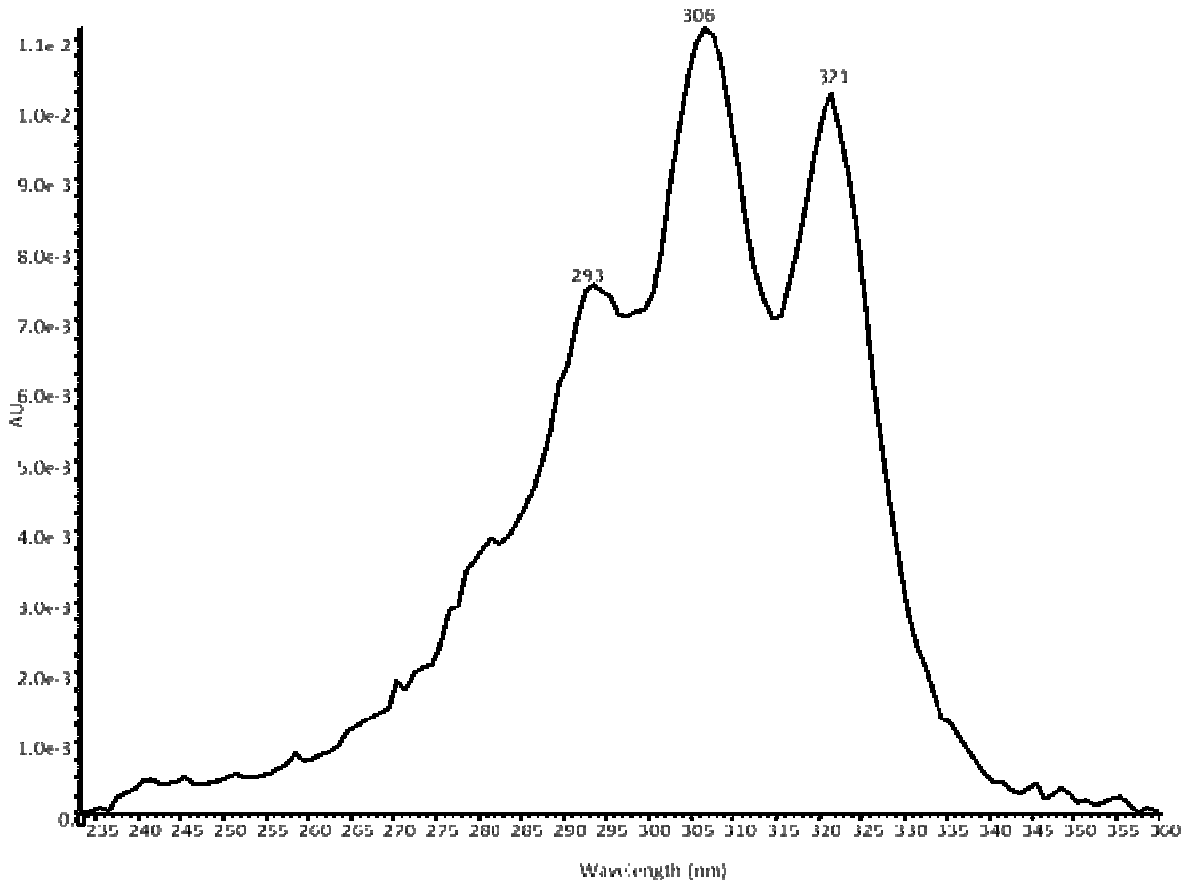

Figure S7: UV–vis spectrum of compound **5** in acetonitrile.

5-((1*E*,3*E*,5*E*,7*E*,10*Z*)-hexadeca-1,3,5,7,10-pentaenyl)dihydrofuran-2(3*H*)-one (**6**) was obtained as a light-yellow oil. The analysis of the *J*-couplings between H11 and H12 revealed the *trans* character of the double bond in comparison to compound **5**. Furthermore, a lambda (max) shift of about 2 nm in the UV–vis confirmed this assignment.

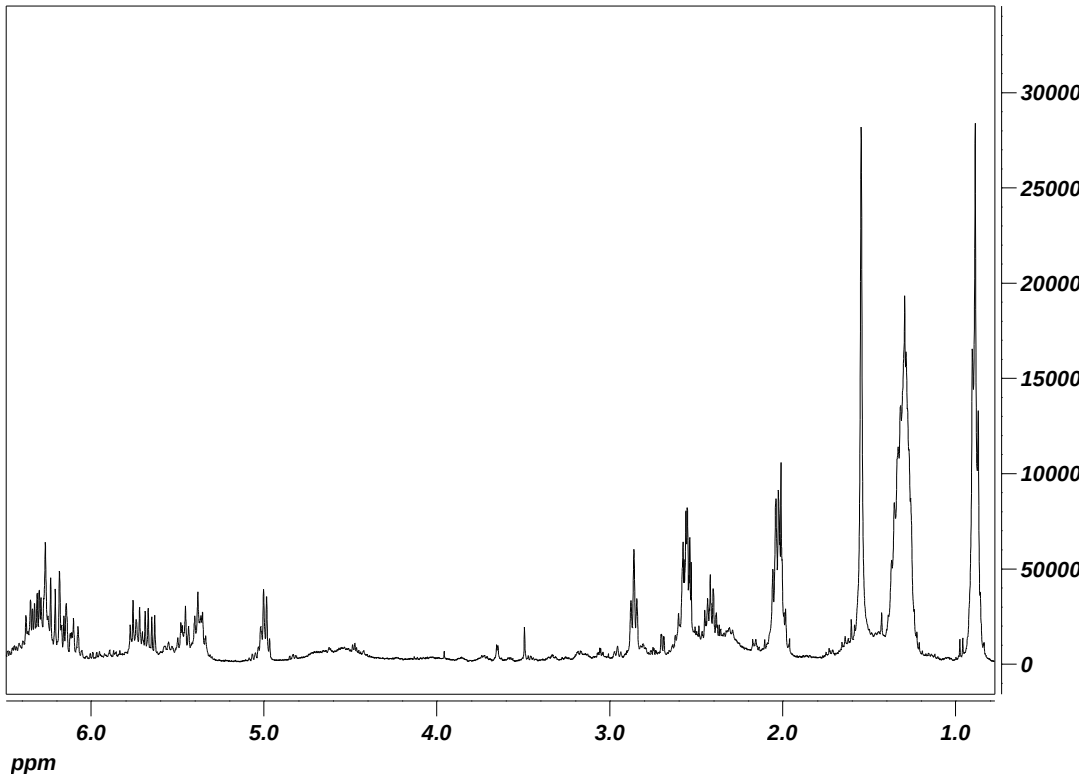

Figure S8: ^{1}H NMR spectrum of compound **6**.

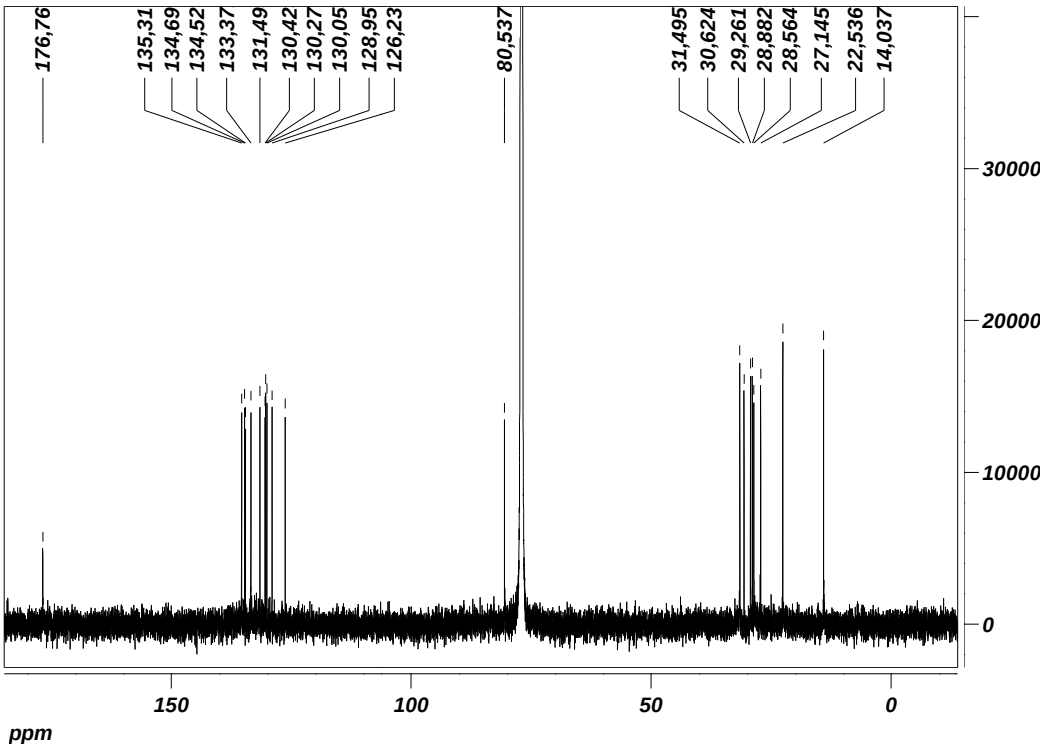

Figure S9: ^{13}C NMR spectrum of compound **6**.

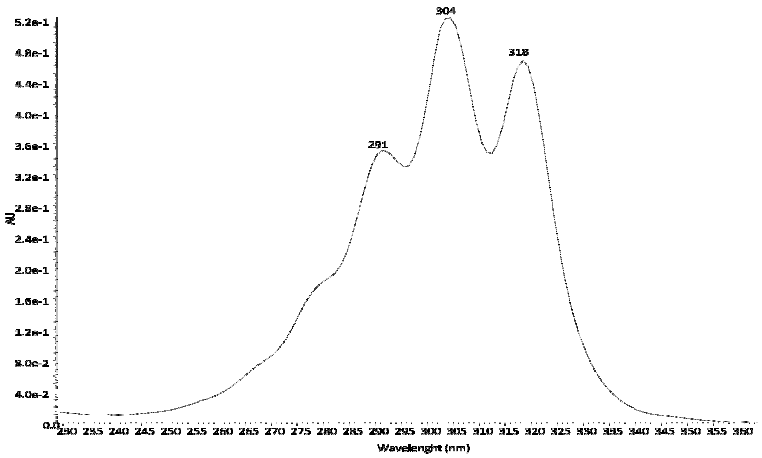

Figure S10: UV–vis spectrum of compound **6** in acetonitrile.