

Novel insect antifeedant and ixodicidal nootkatone derivatives

Alberto Galisteo Pretel¹, Helena Pérez del Pulgar¹, A. Sonia Olmeda², Azucena Gonzalez-Coloma³, Alejandro F. Barrero^{1,*} and José Francisco Quílez del Moral^{1,*}

¹ Department of Organic Chemistry, Institute of Biotechnology, University of Granada, 18071 Granada, Spain; albertogapre@ugr.es (A.G.); helenaperezpv@ugr.es (H.P.P.)

² Faculty of Veterinary, Complutense University of Madrid (UCM), 28040 Madrid, Spain; angeles@ucm.es (A.S.O.)

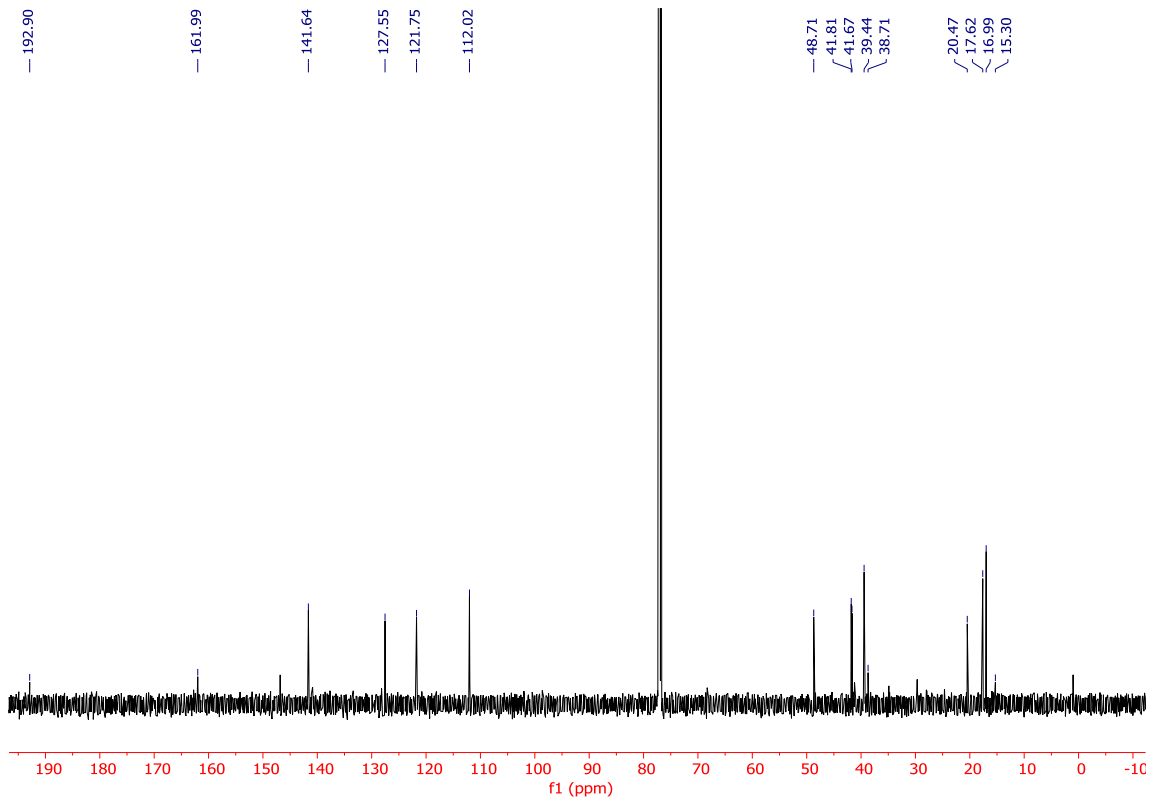
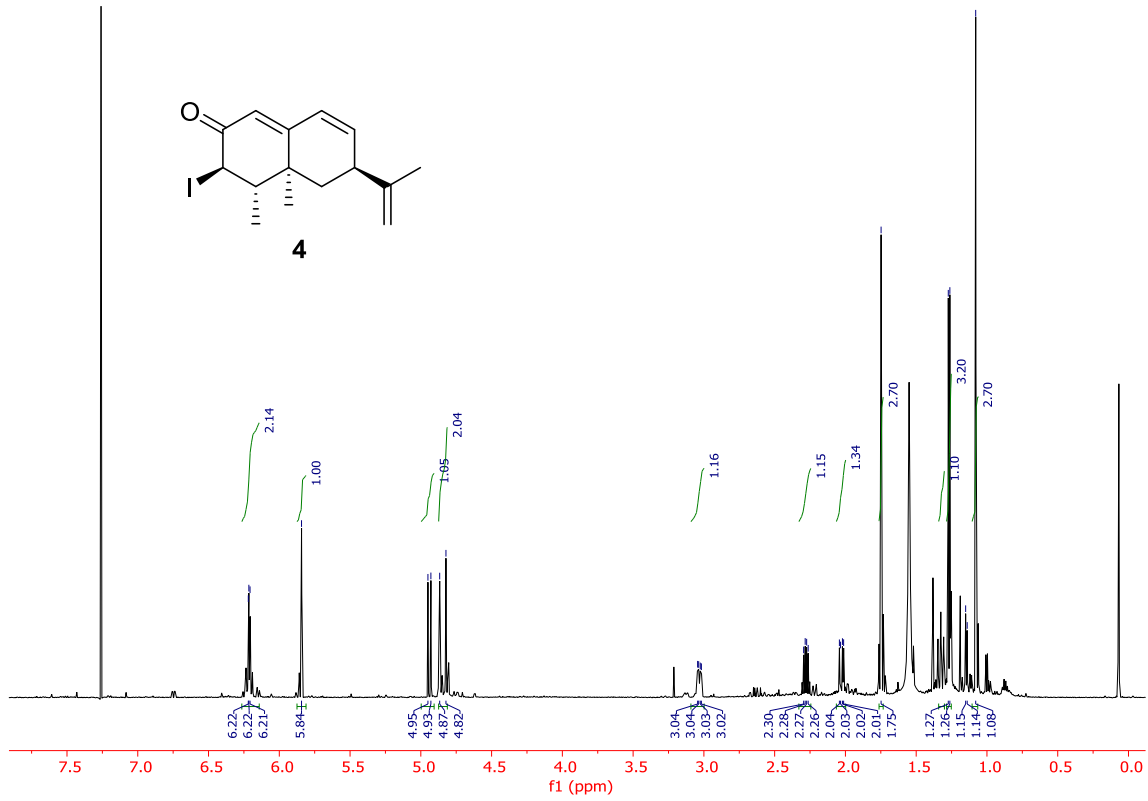
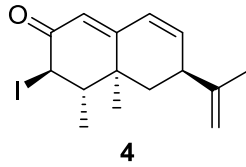
³ Institute of Agricultural Sciences, CSIC, 28006, Madrid, Spain; azu@ica.csic.es (A.G.C.)

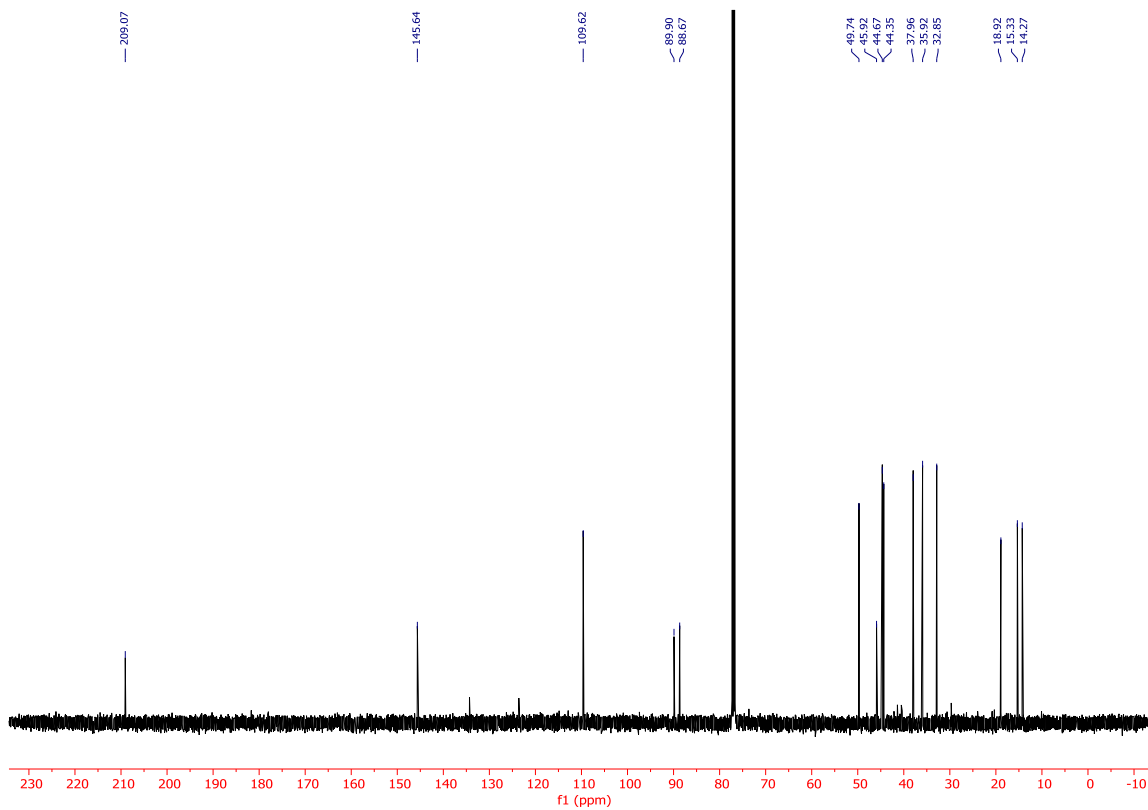
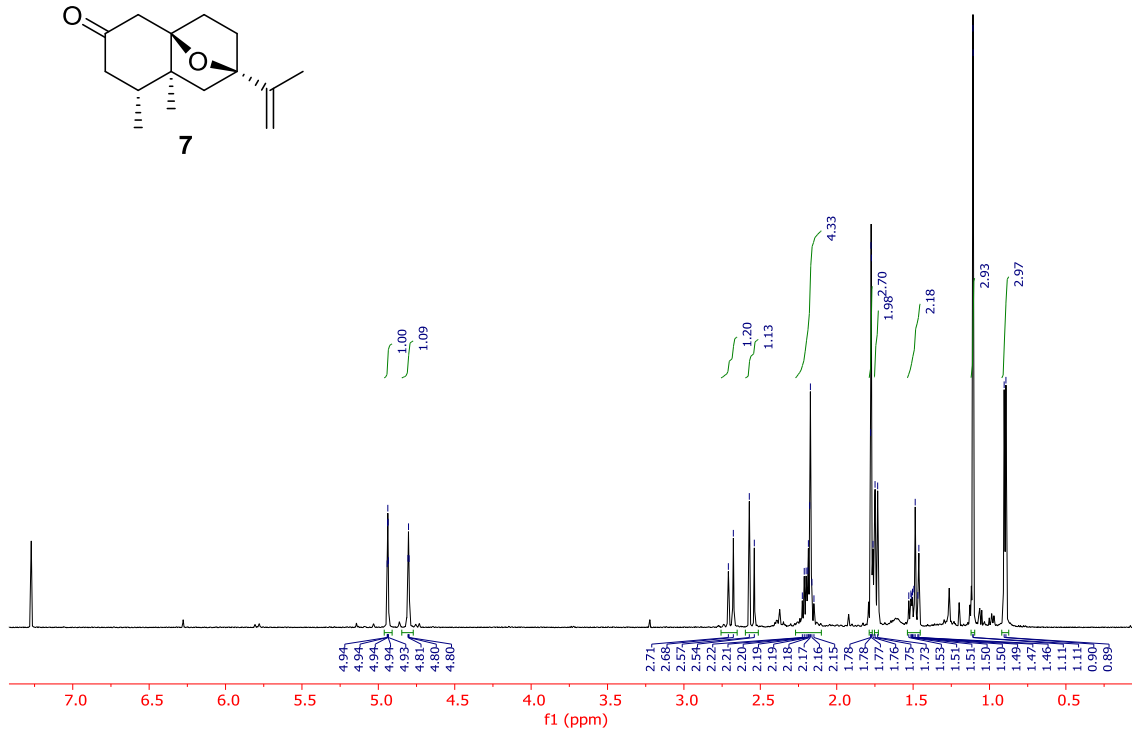
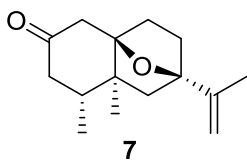
* Correspondence: afbarre@ugr.es; jfquilez@ugr.es; Tel.: +34-958243185

List of contents

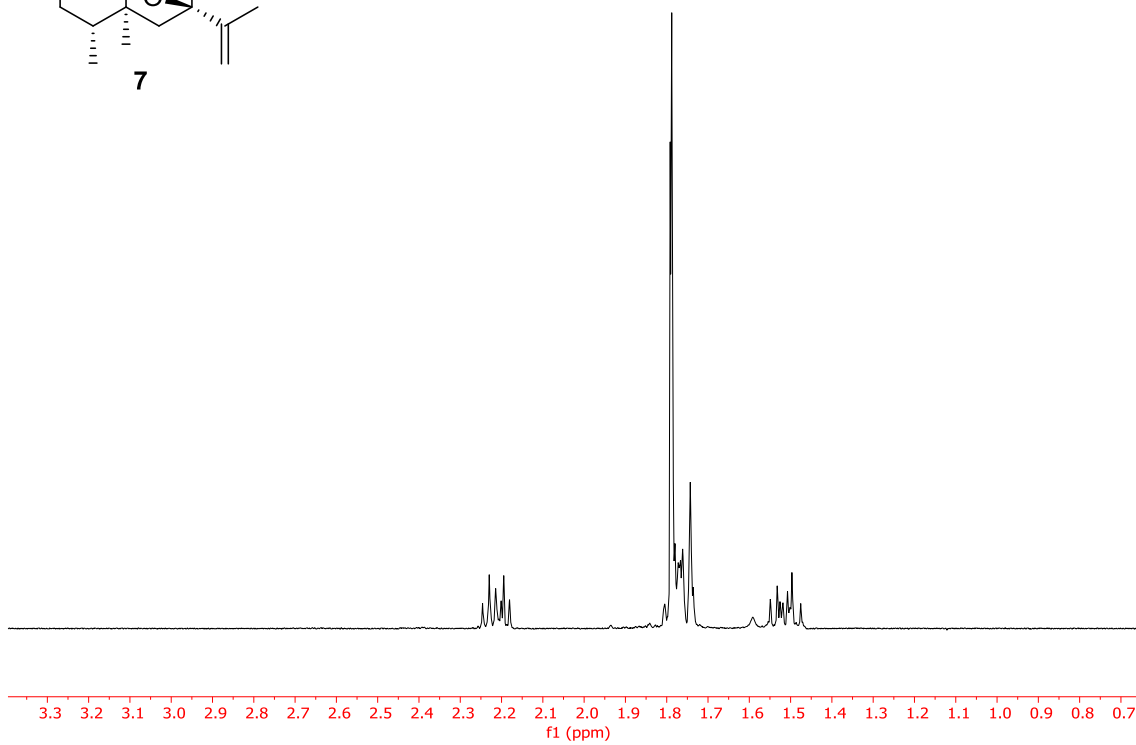
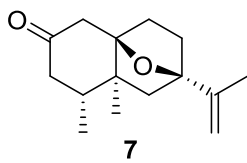
NMR spectra

2-24

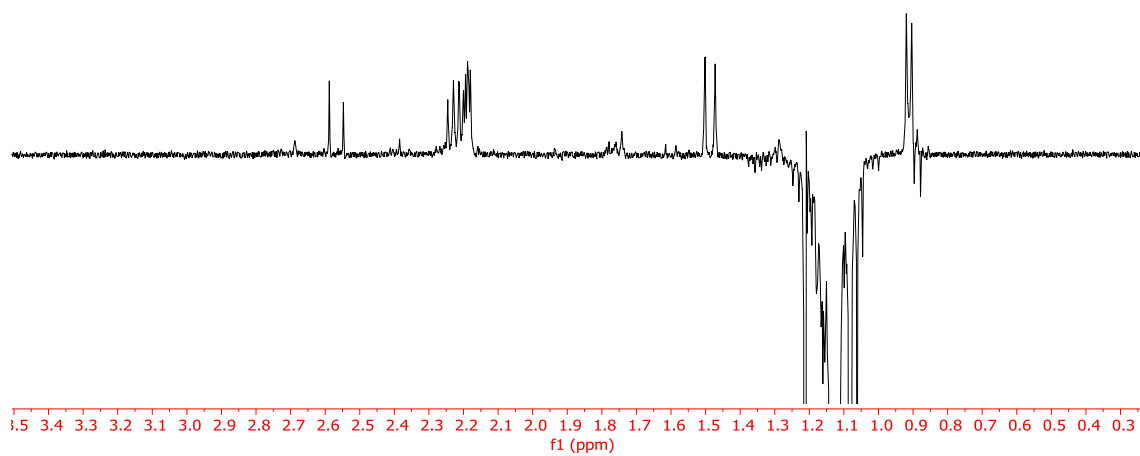




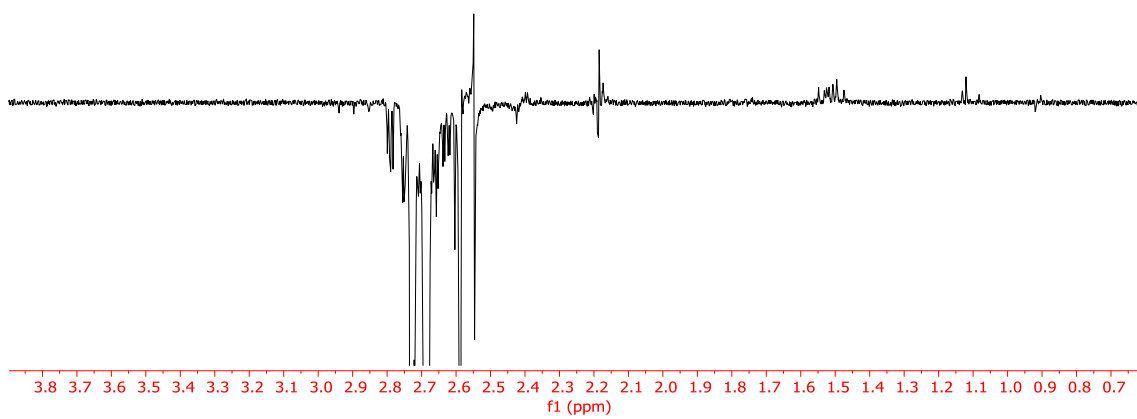
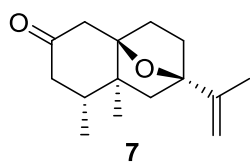
TOCSY



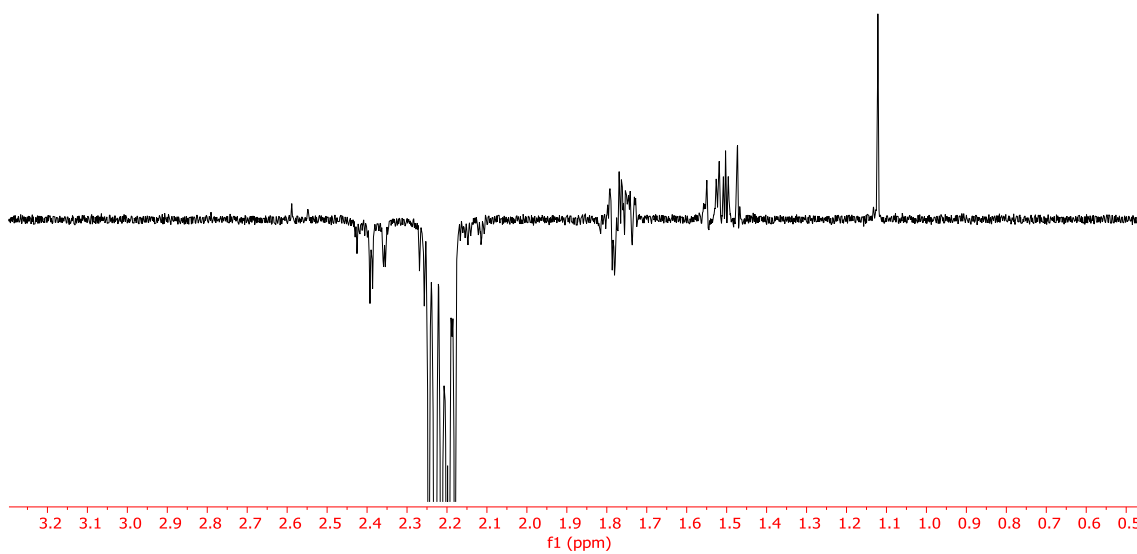
NOESY

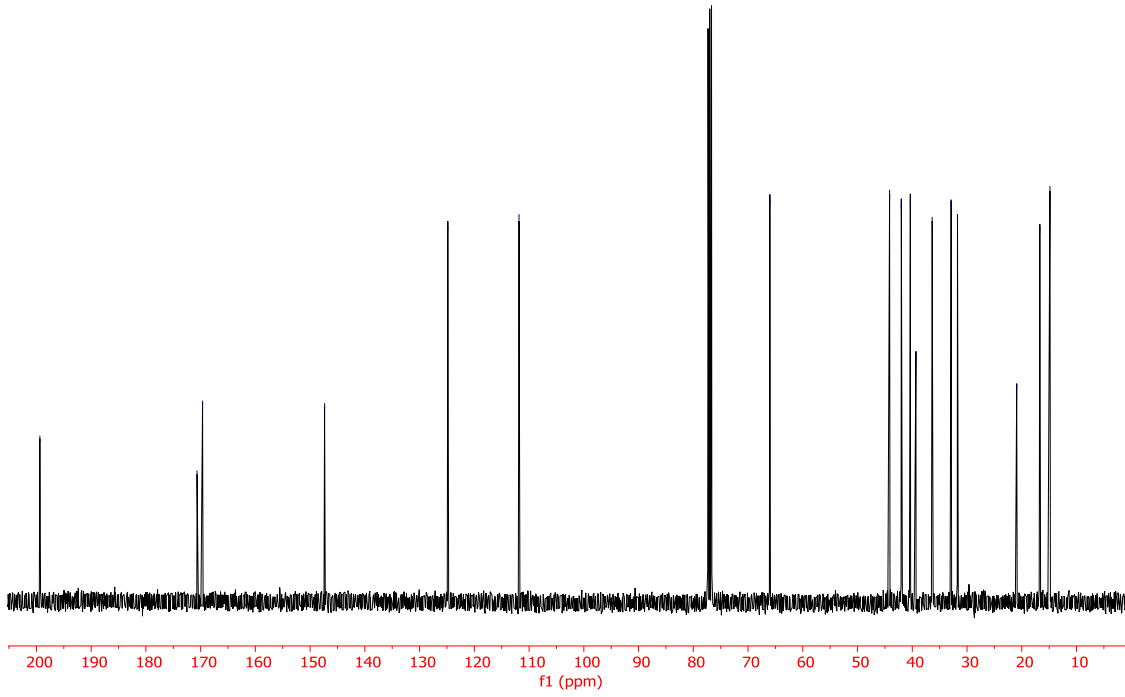
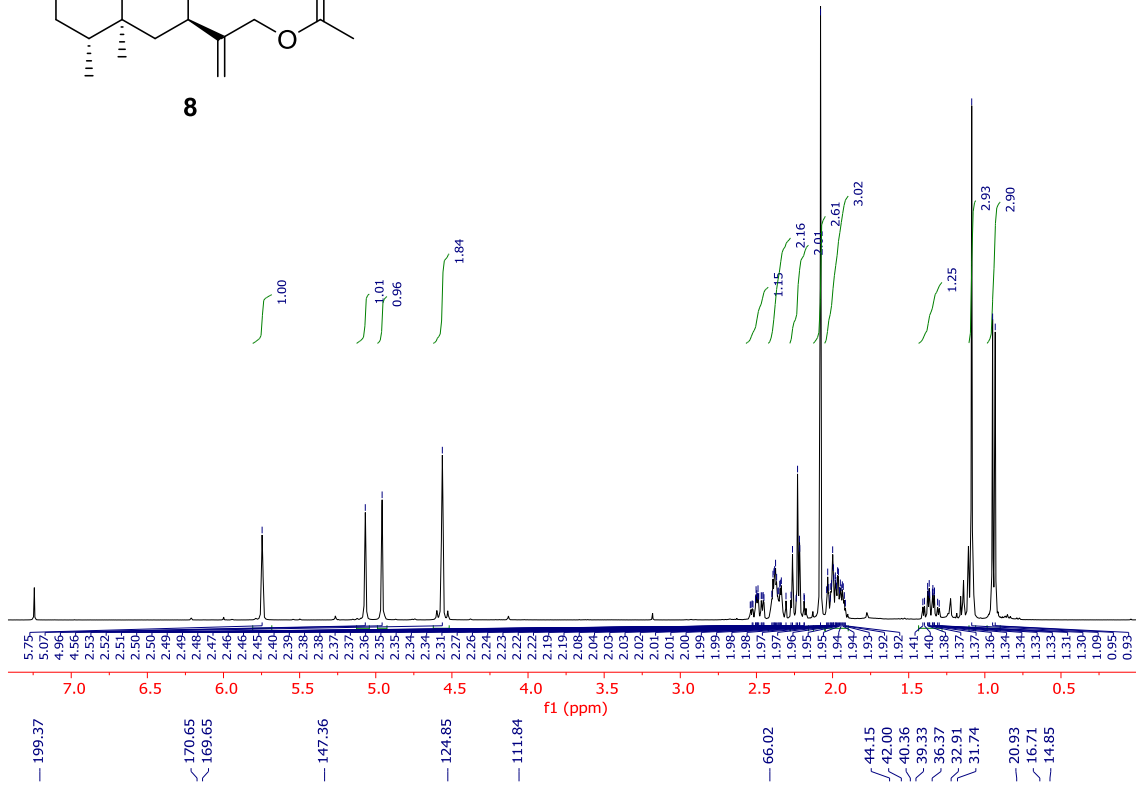
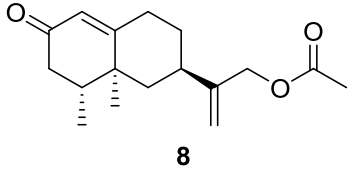


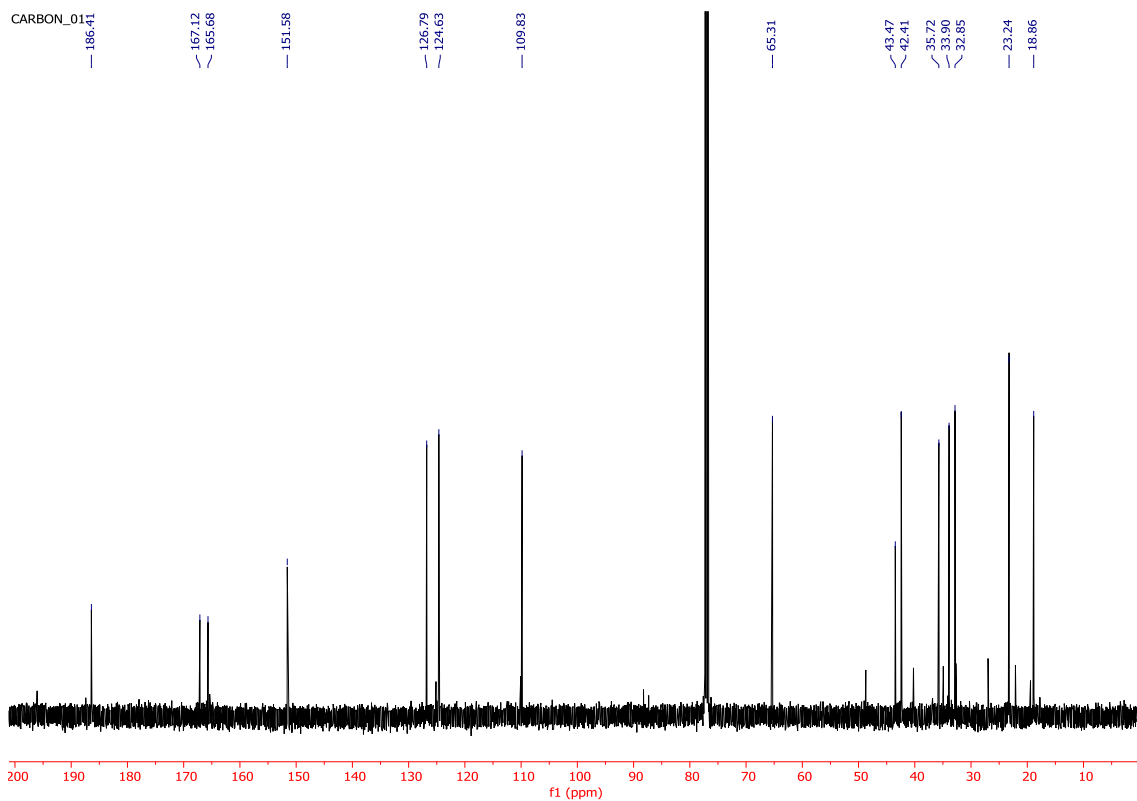
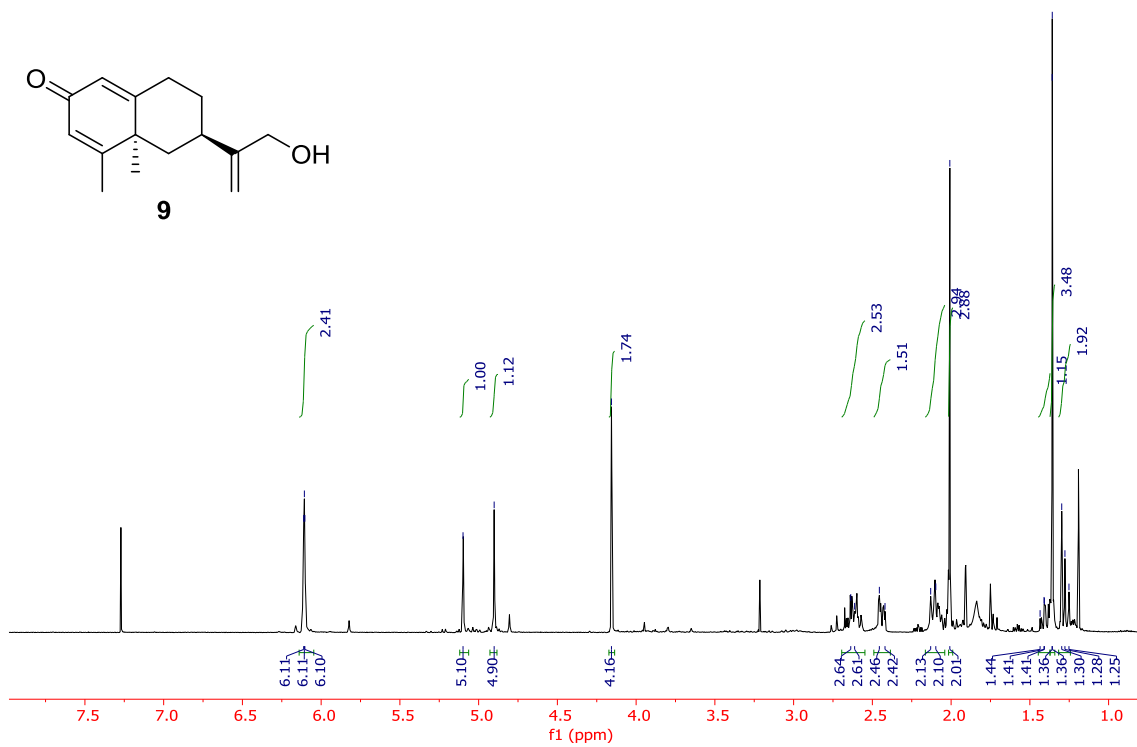
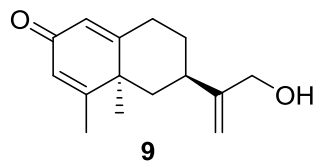
NOESY

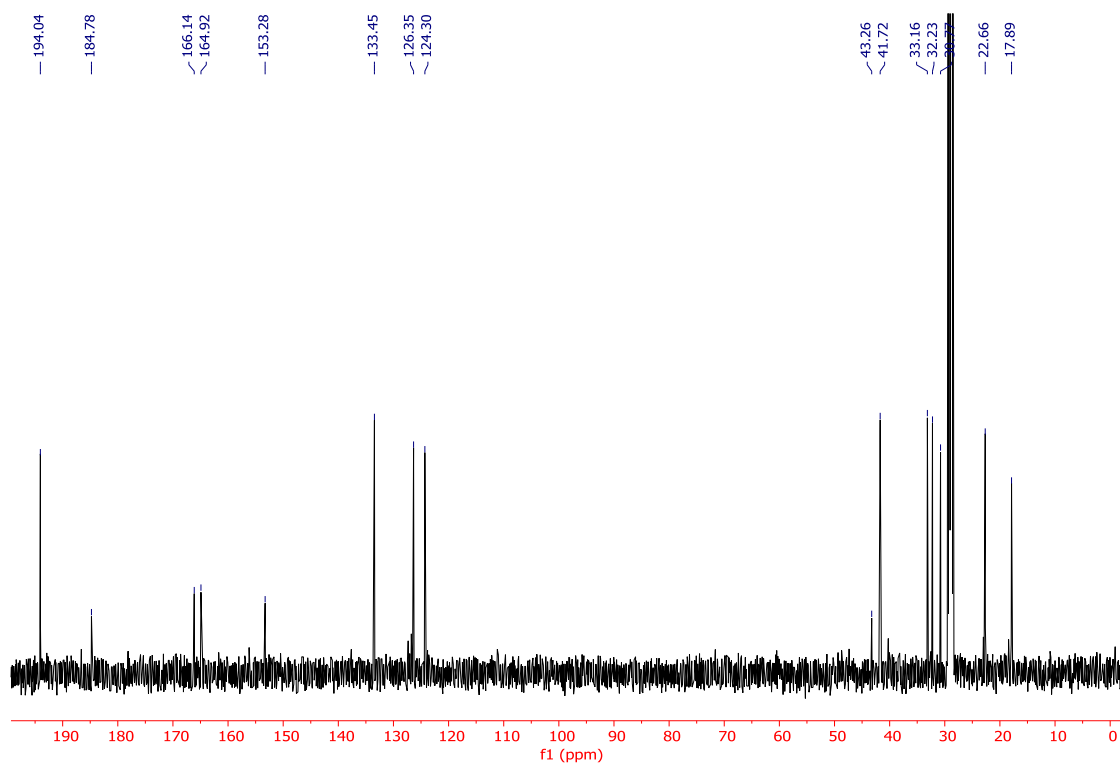
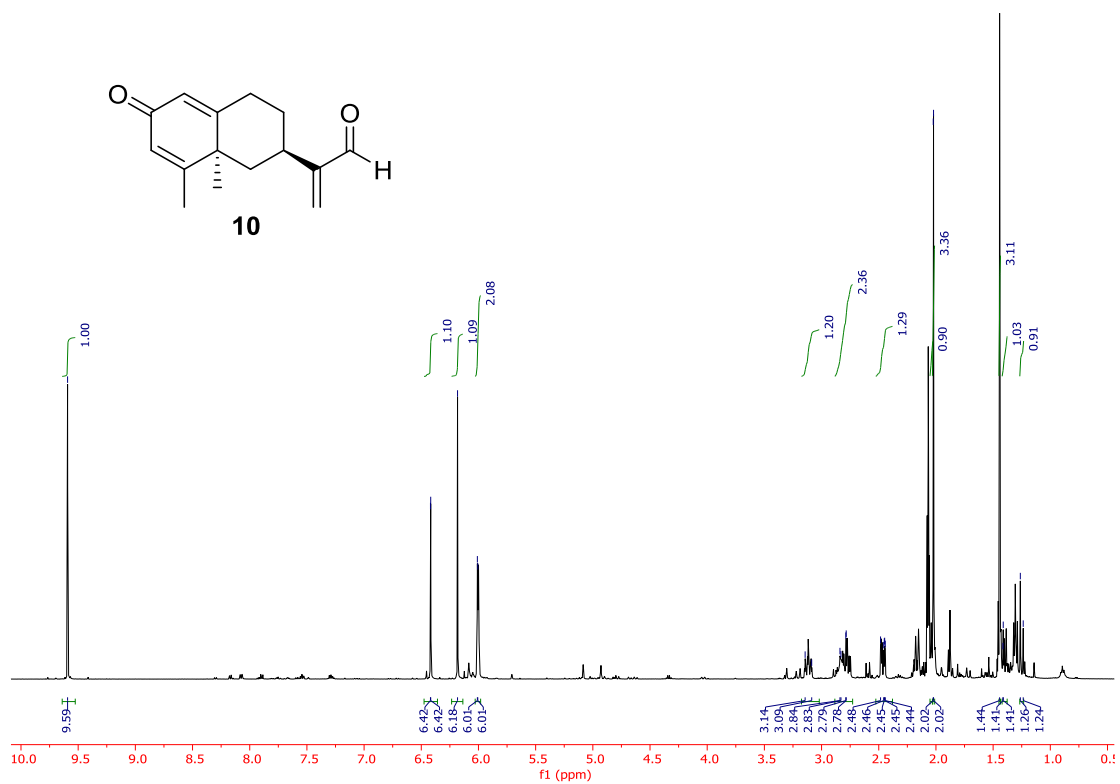
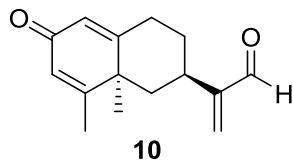


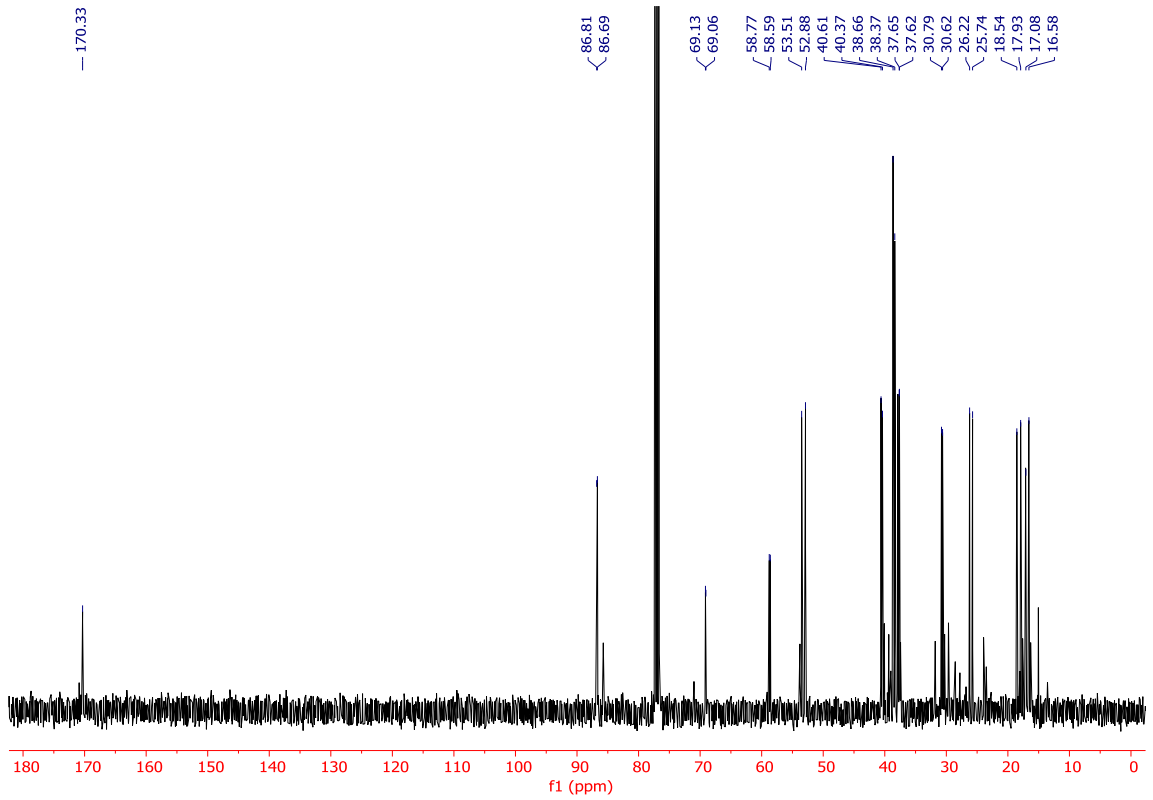
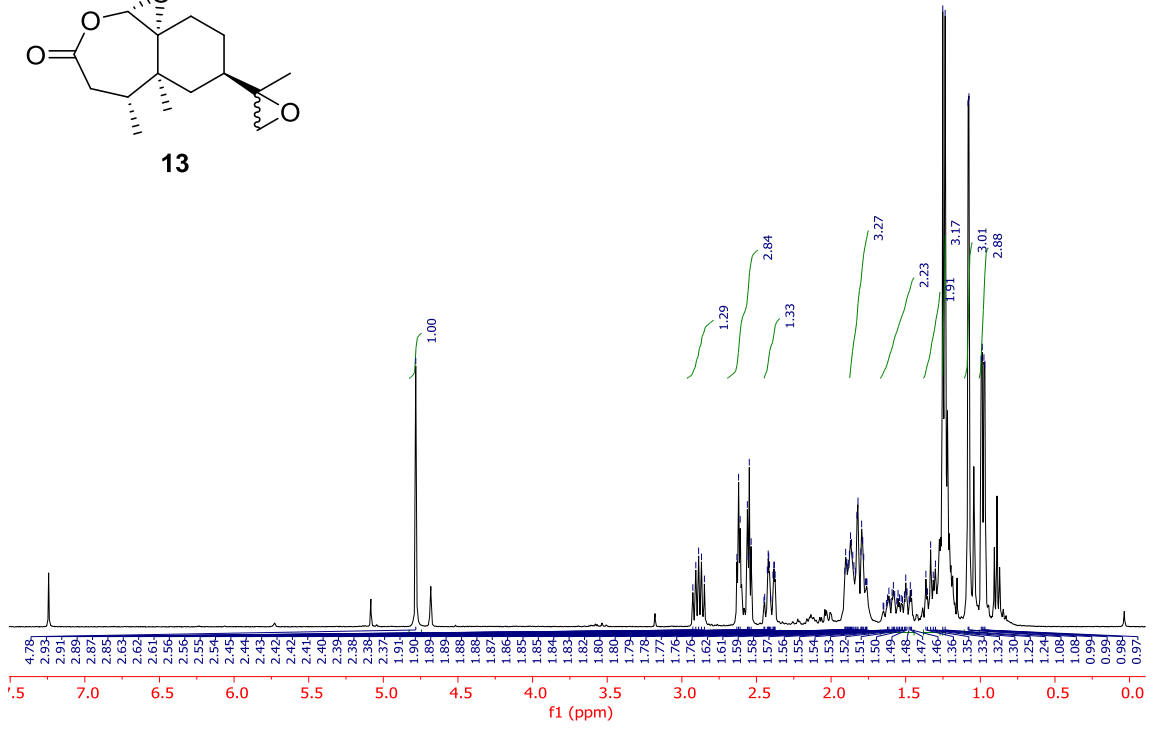
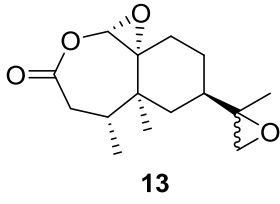
NOESY

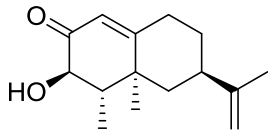




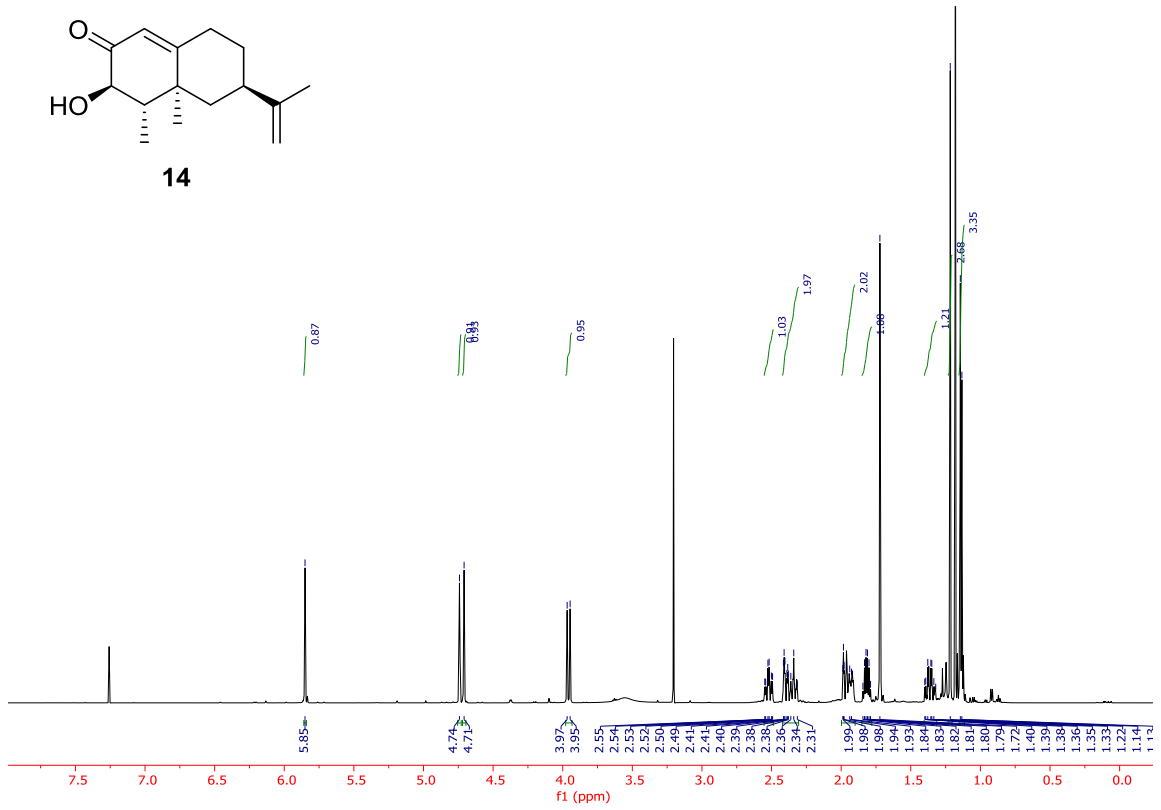








14



199.67

172.10

148.65

120.99

109.47

73.41

47.63

44.18

40.92

39.61

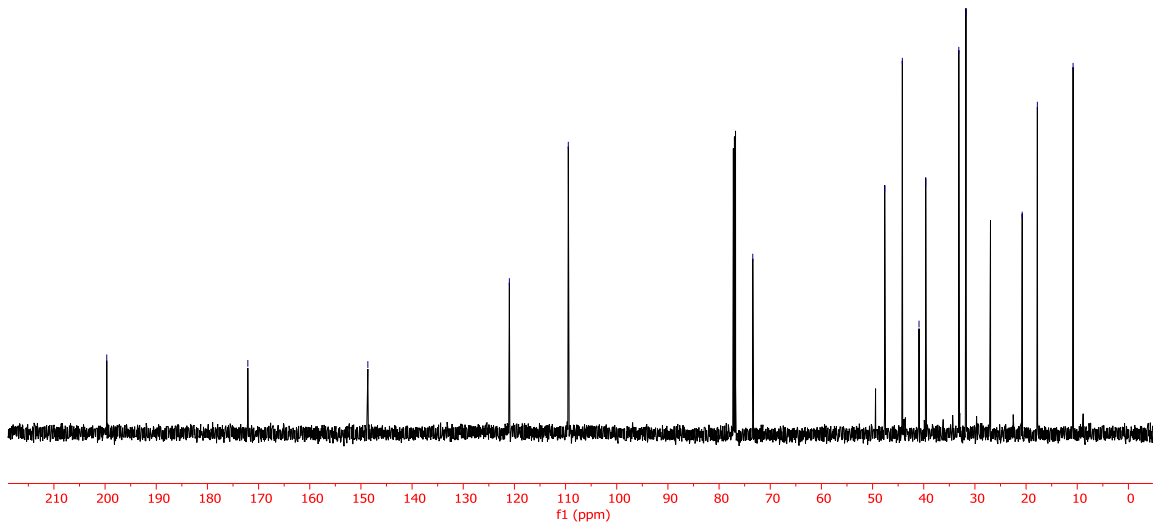
33.15

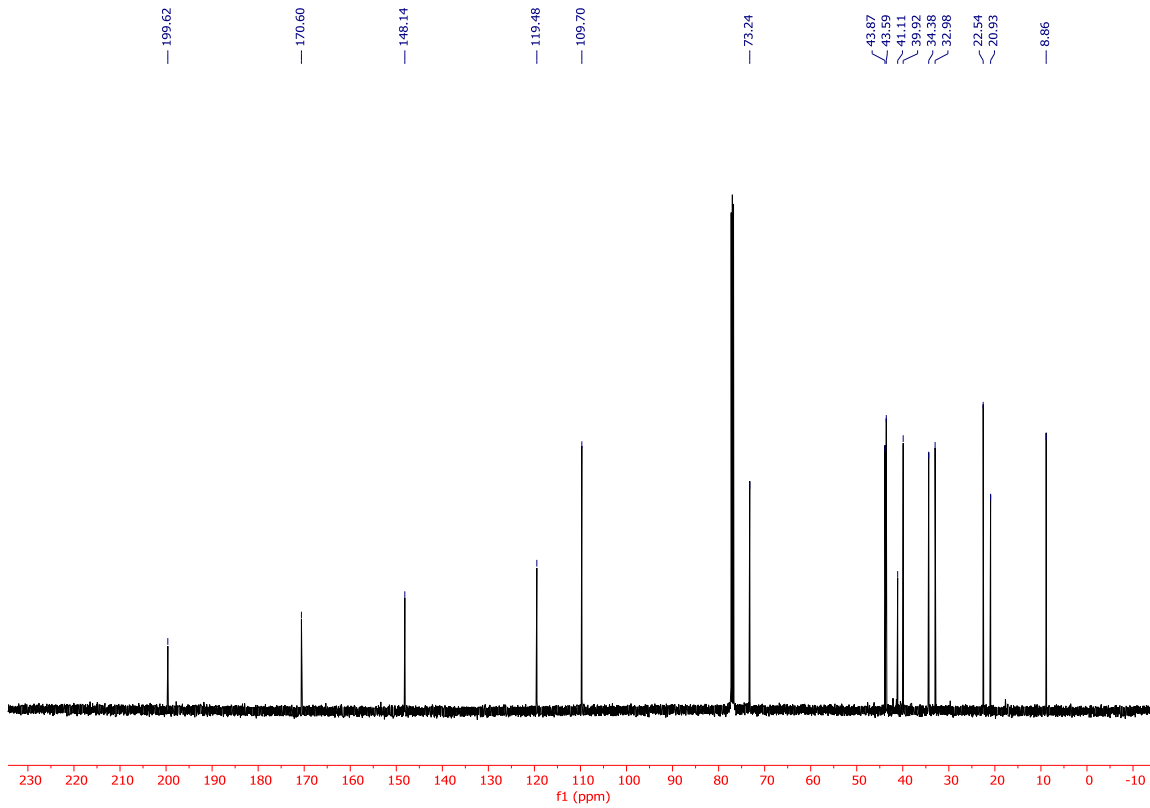
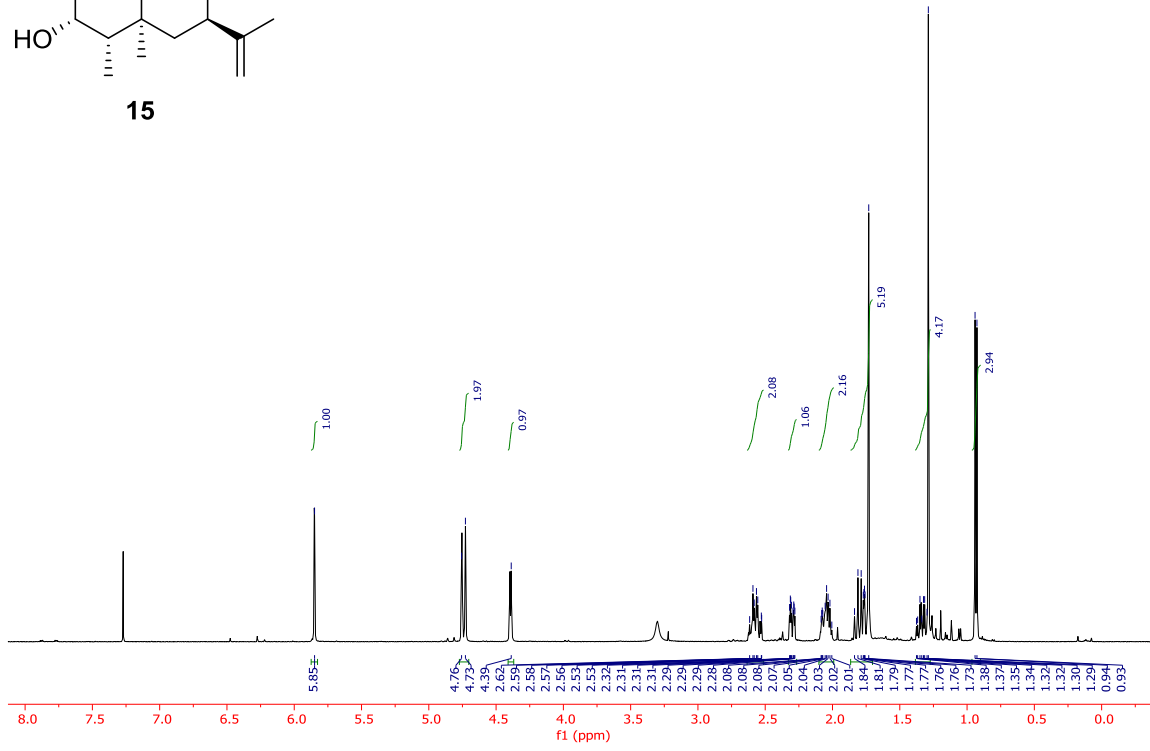
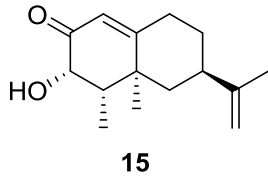
31.76

20.76

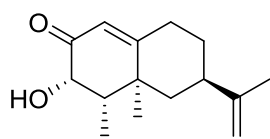
17.80

10.82

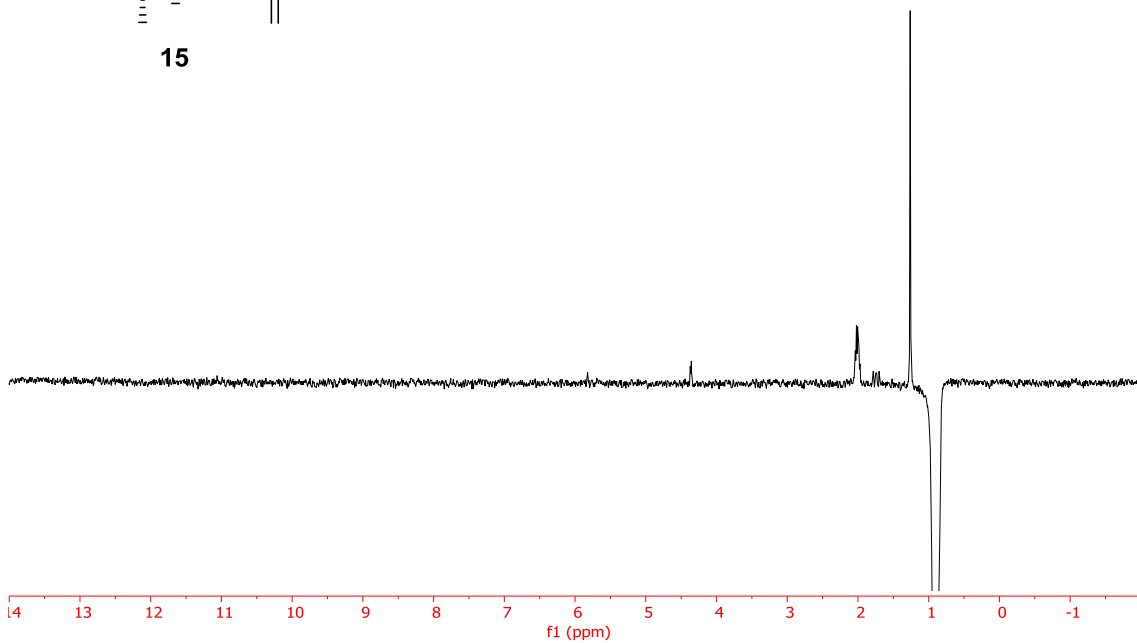




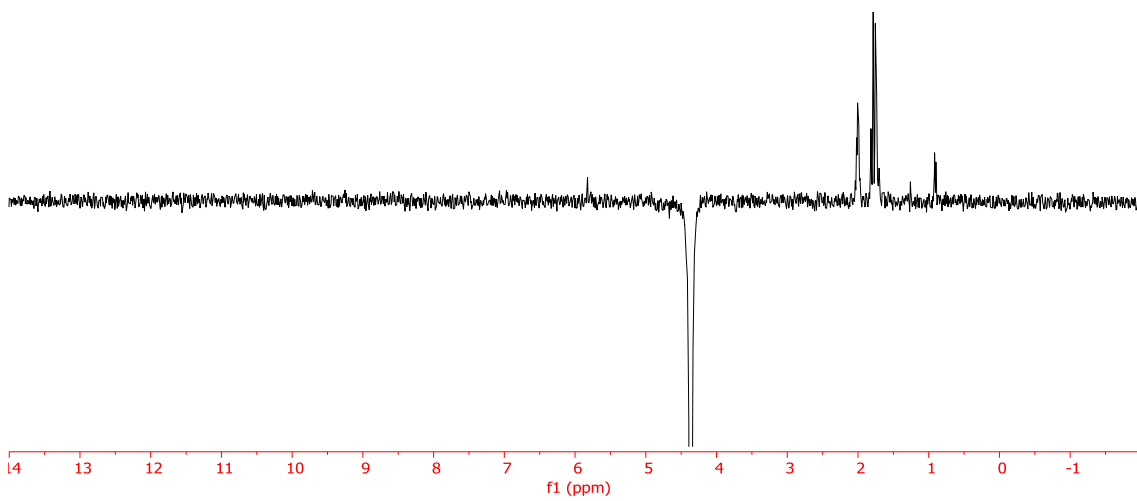
NOEDIFF

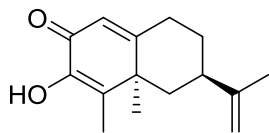


15

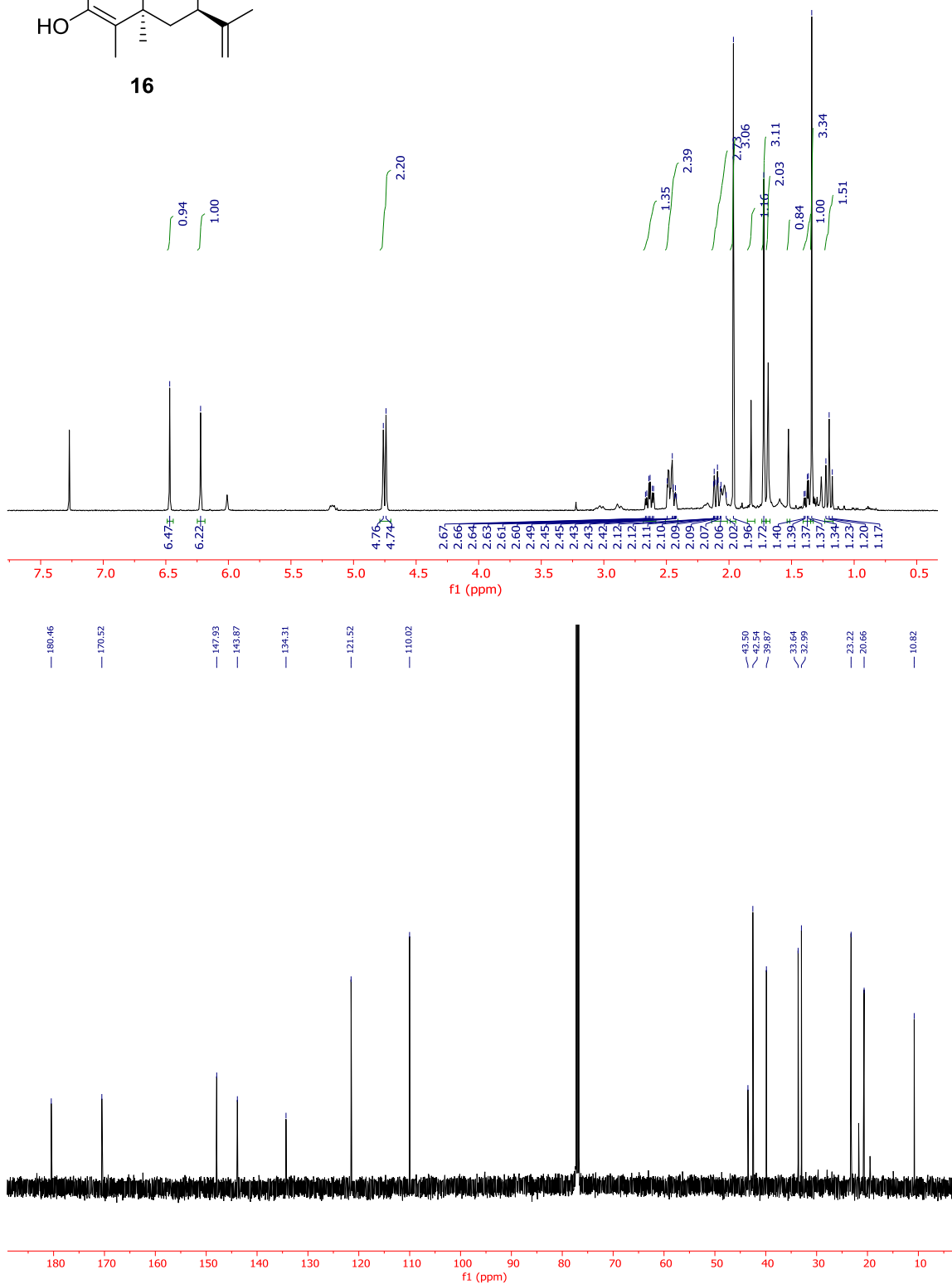


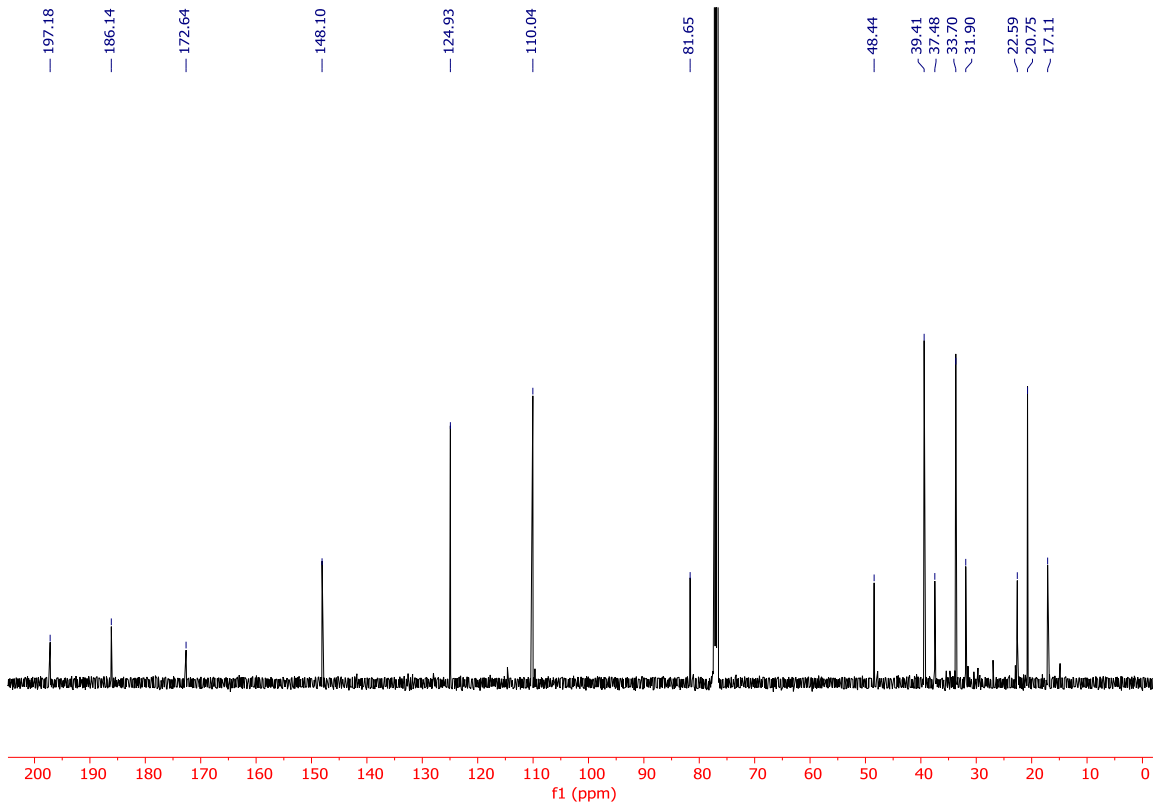
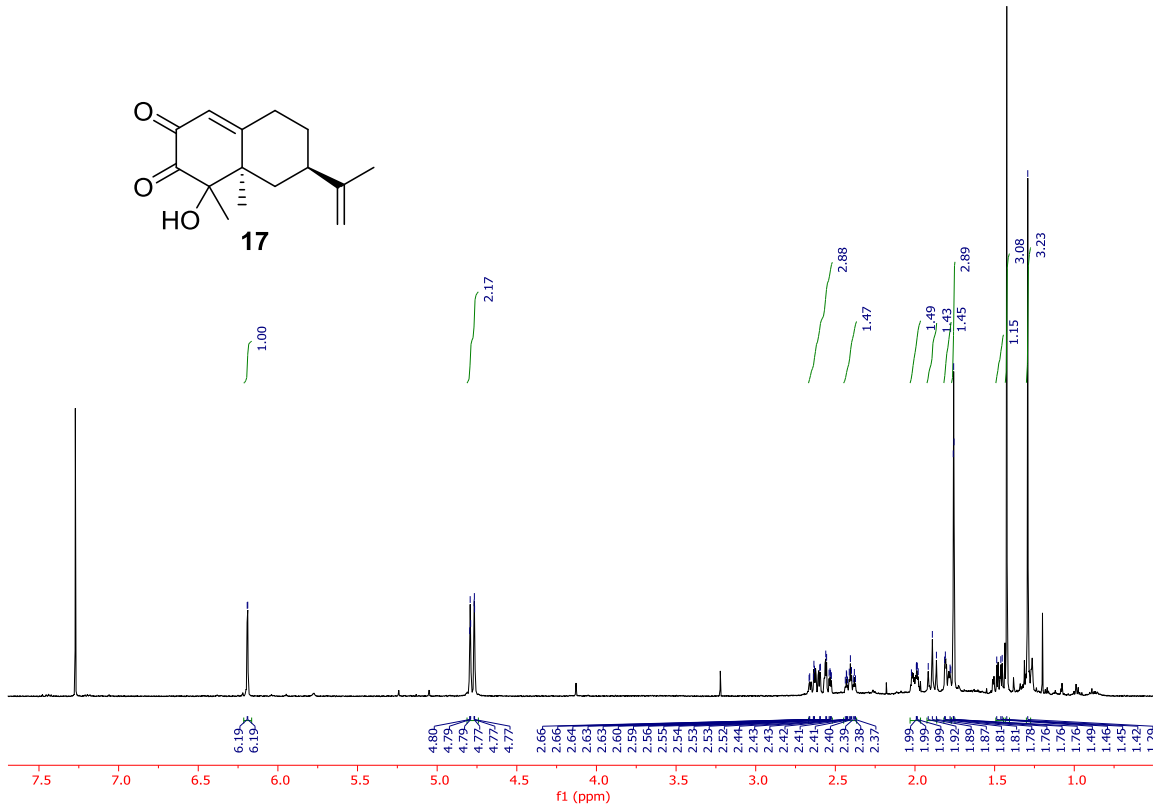
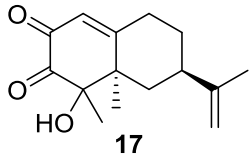
NOEDIFF

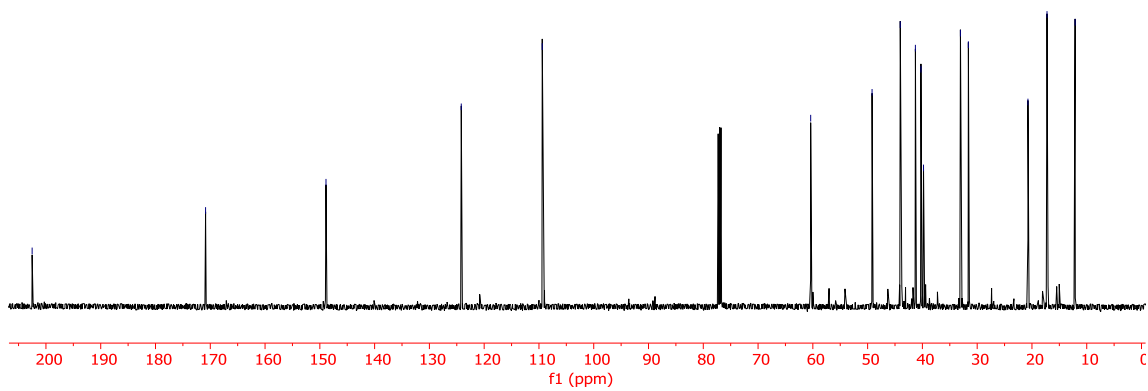
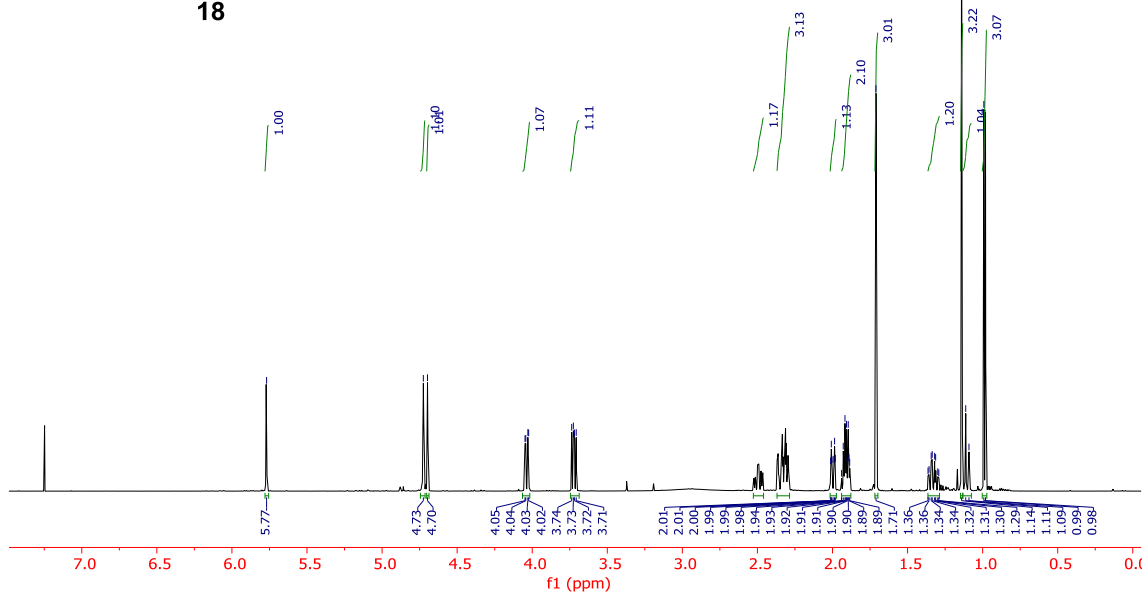
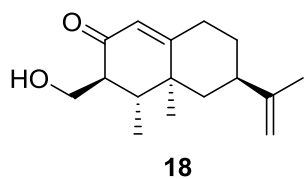




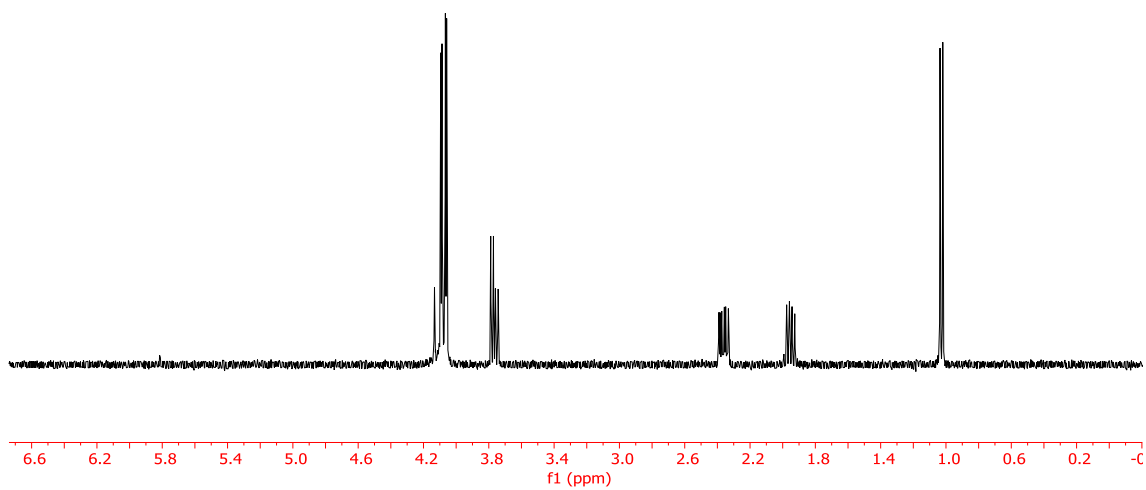
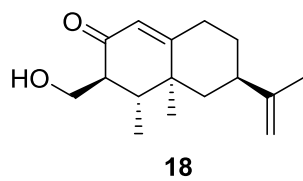
16



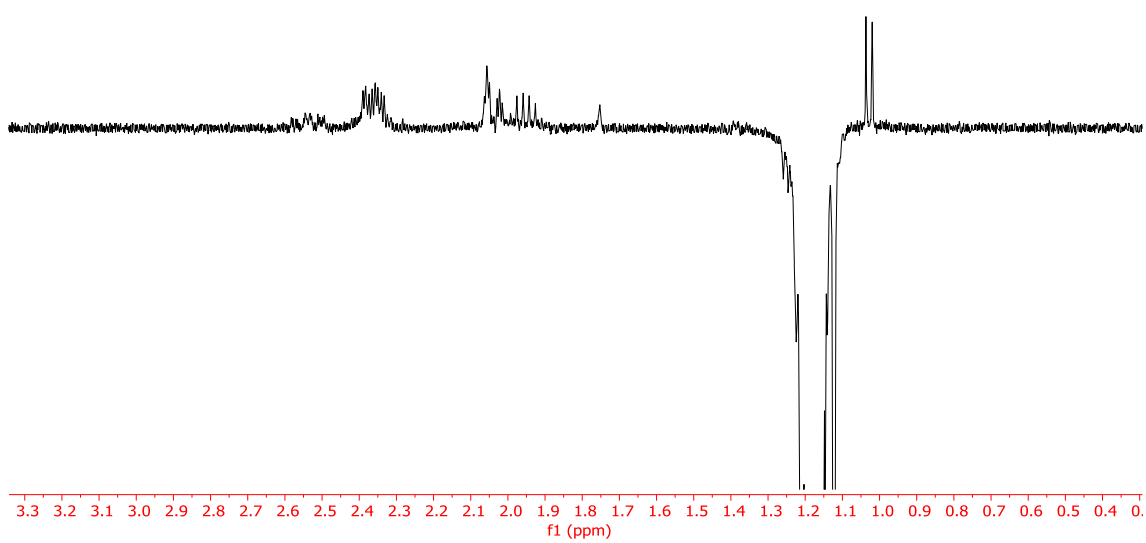




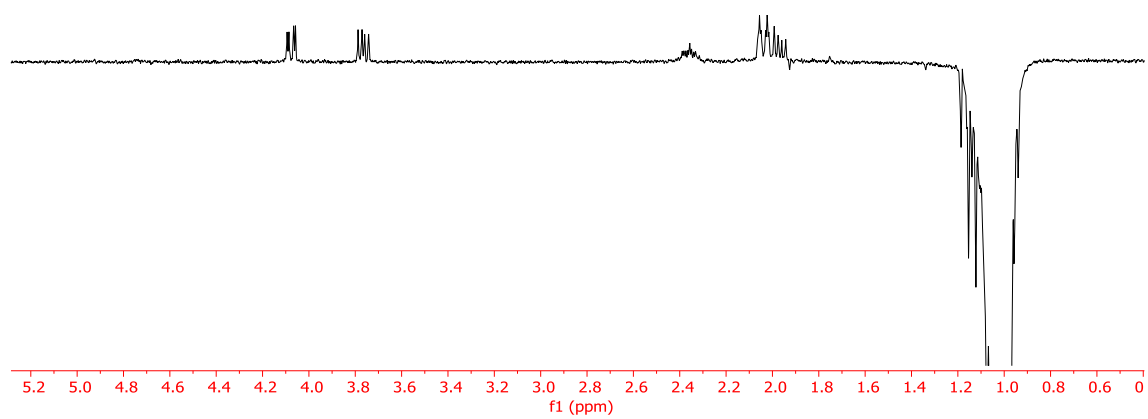
TOCSY

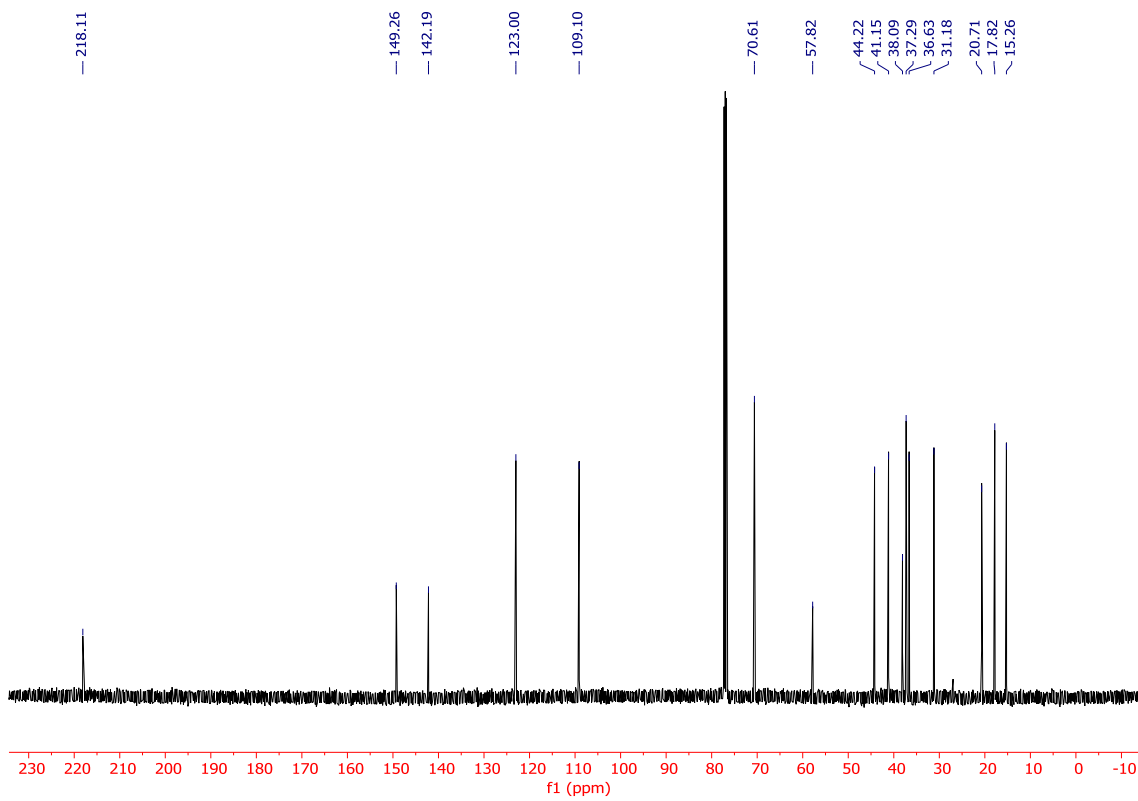
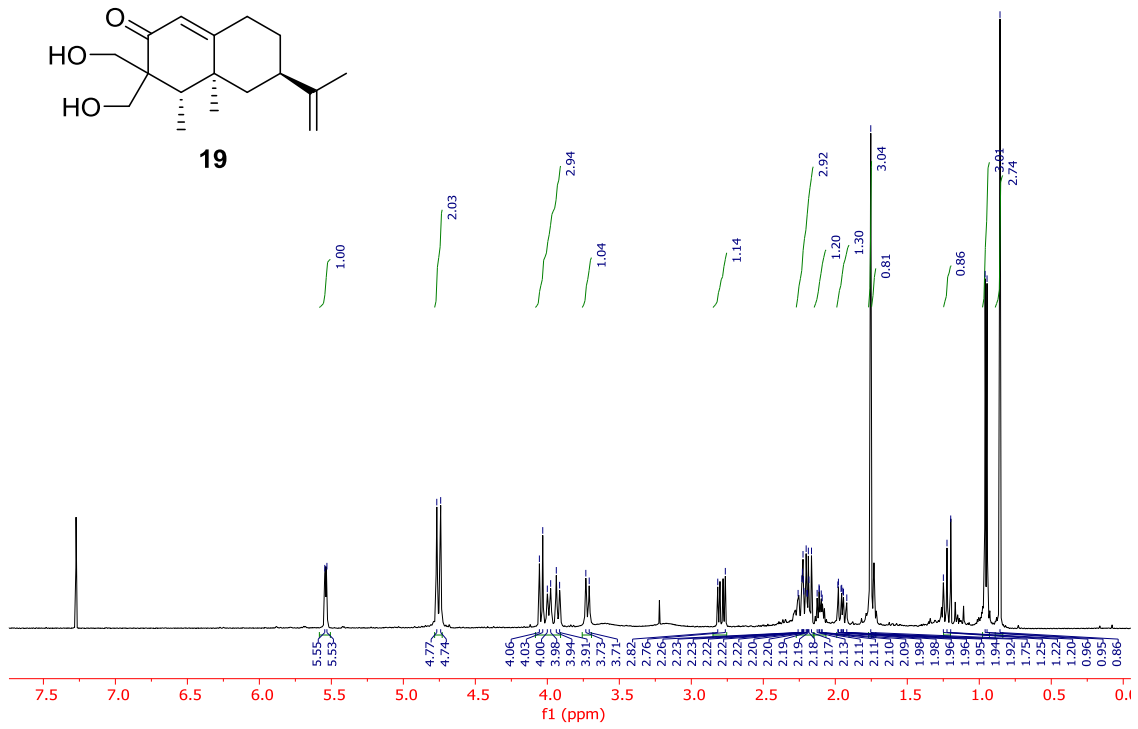
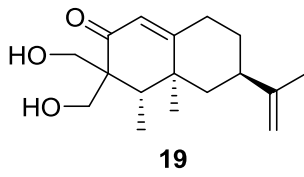


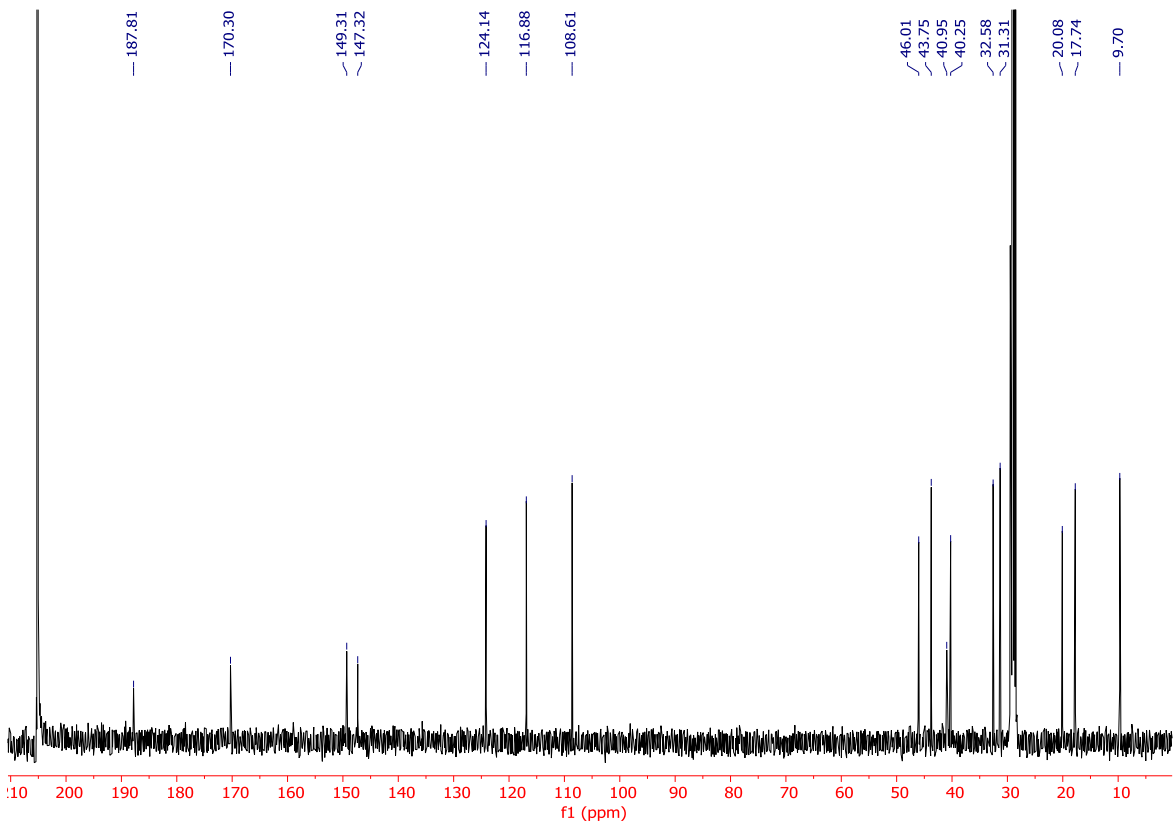
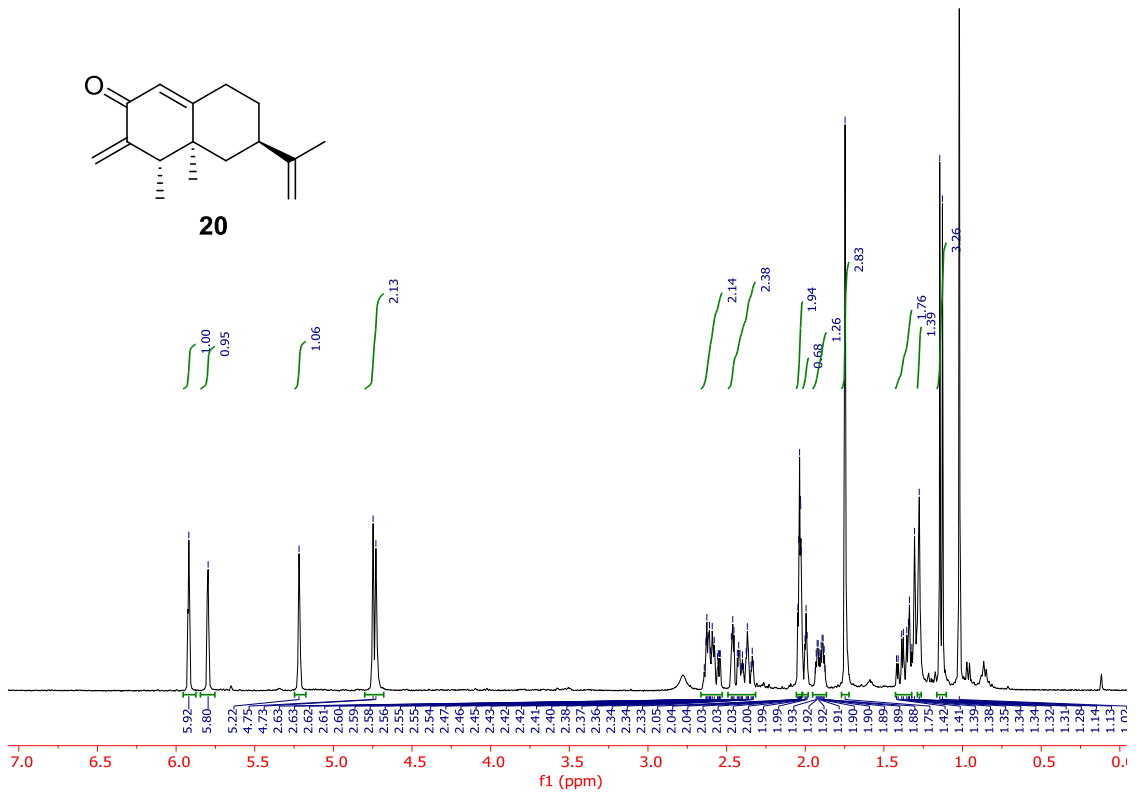
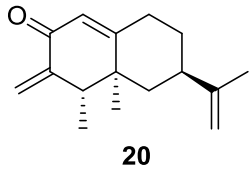
NOESY

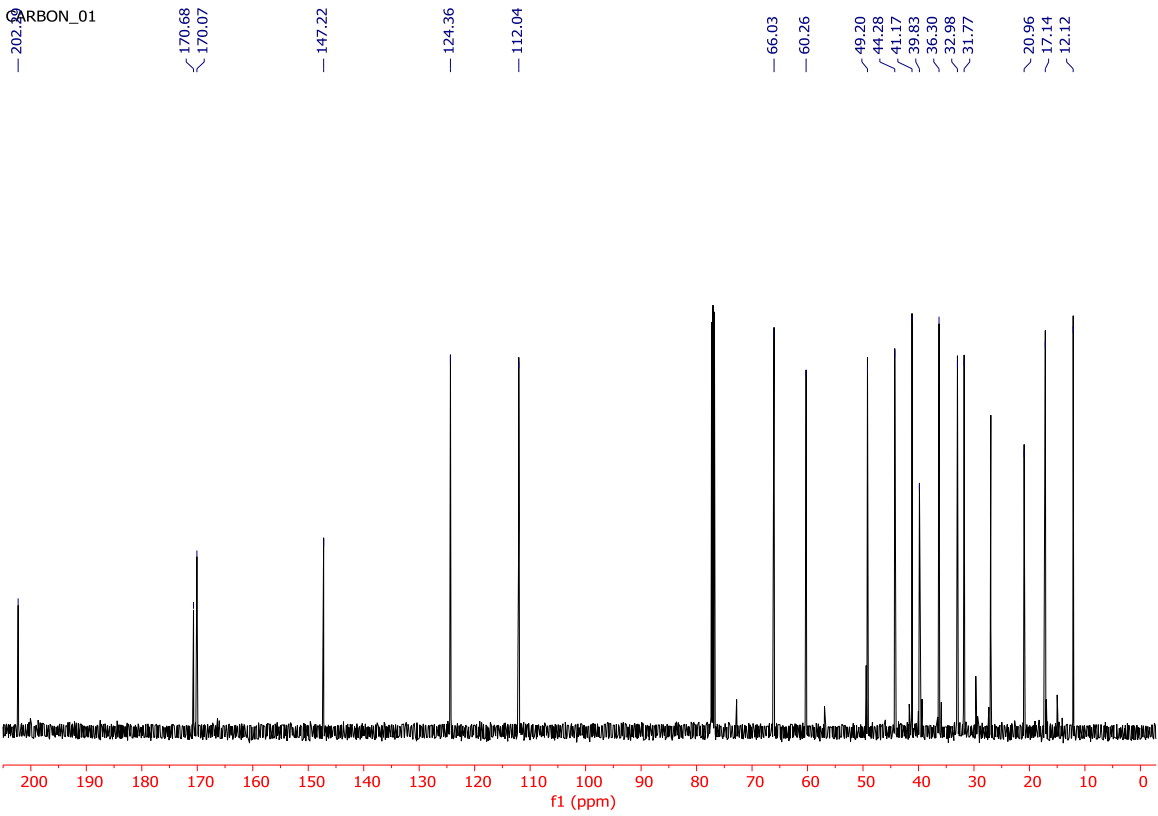
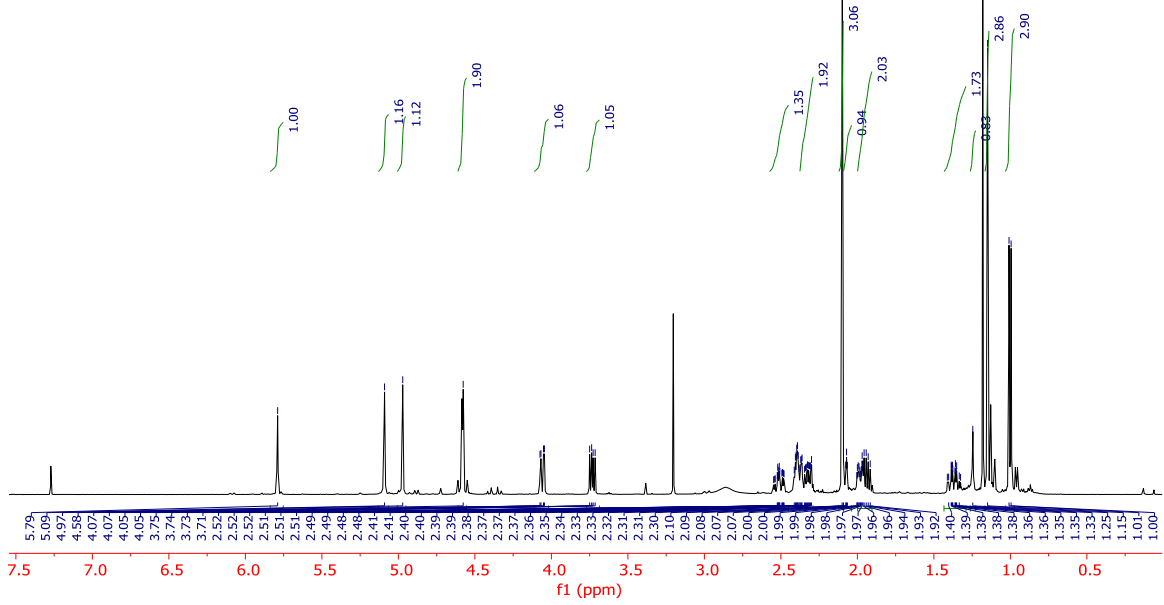
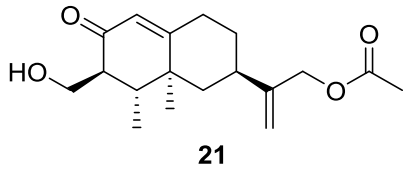


NOESY

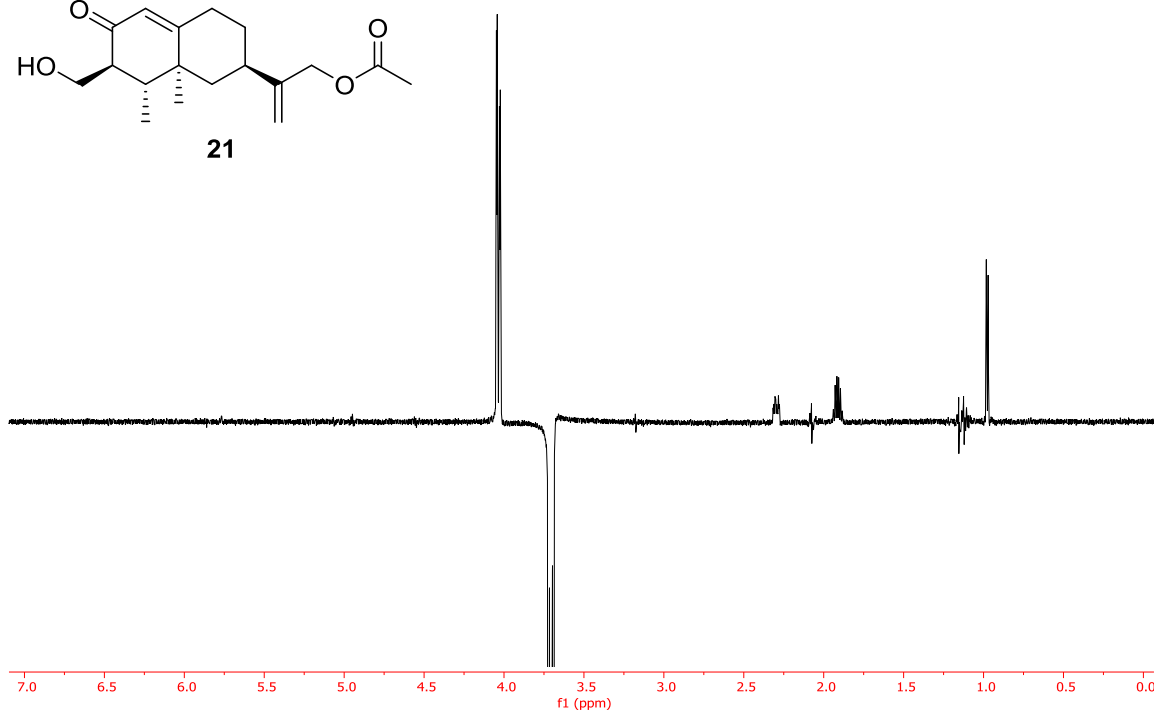
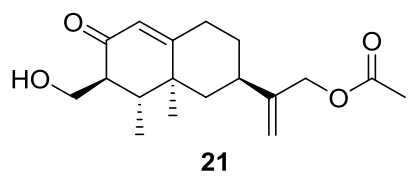




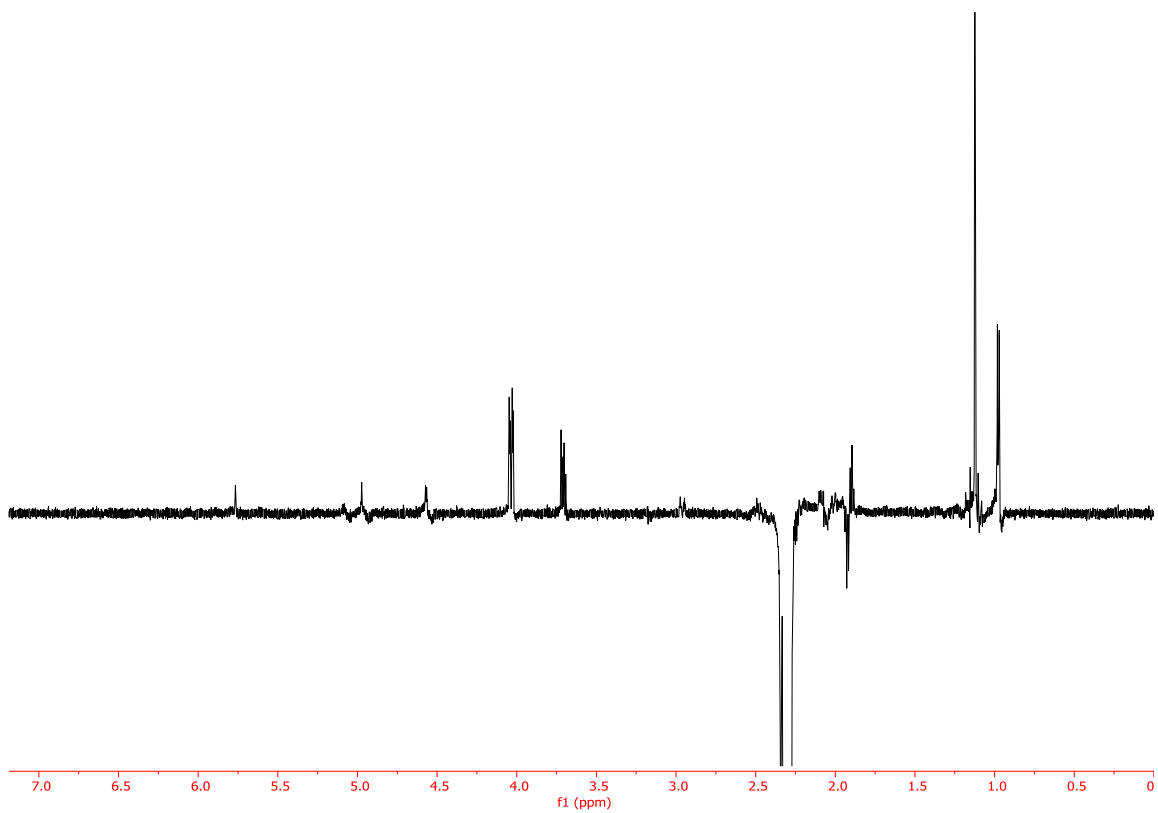




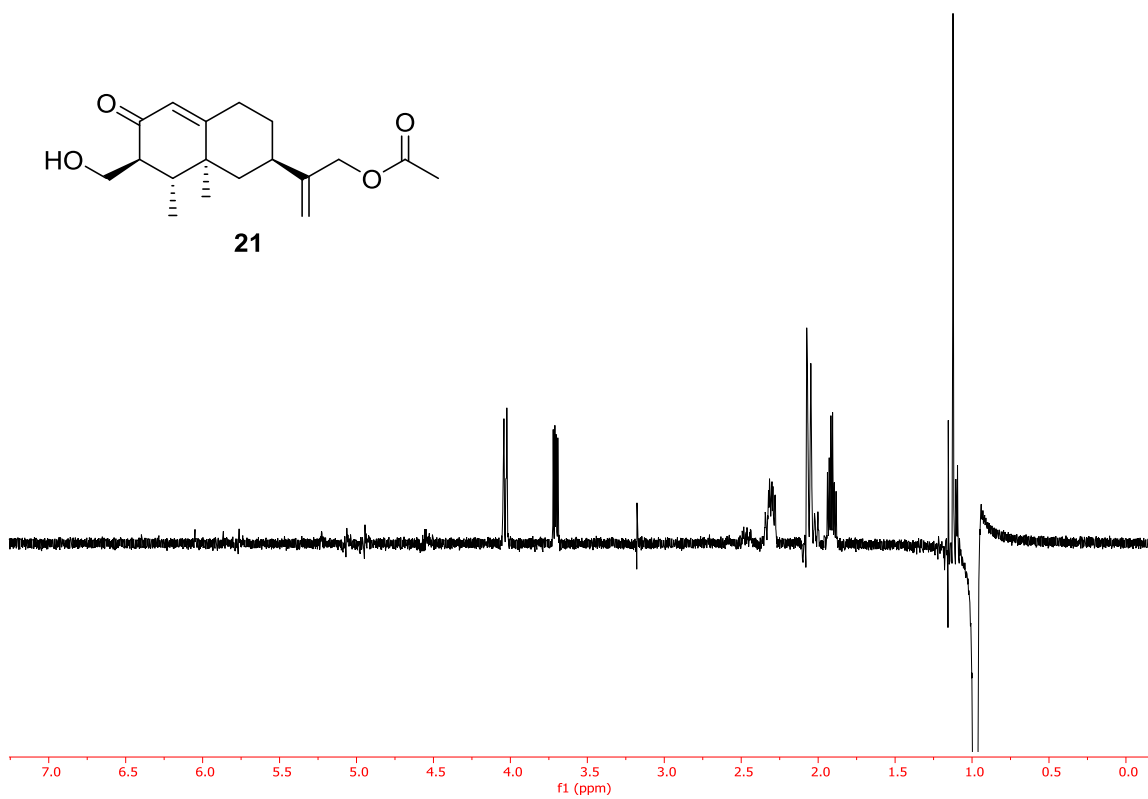
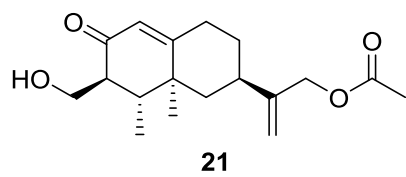
NOESY



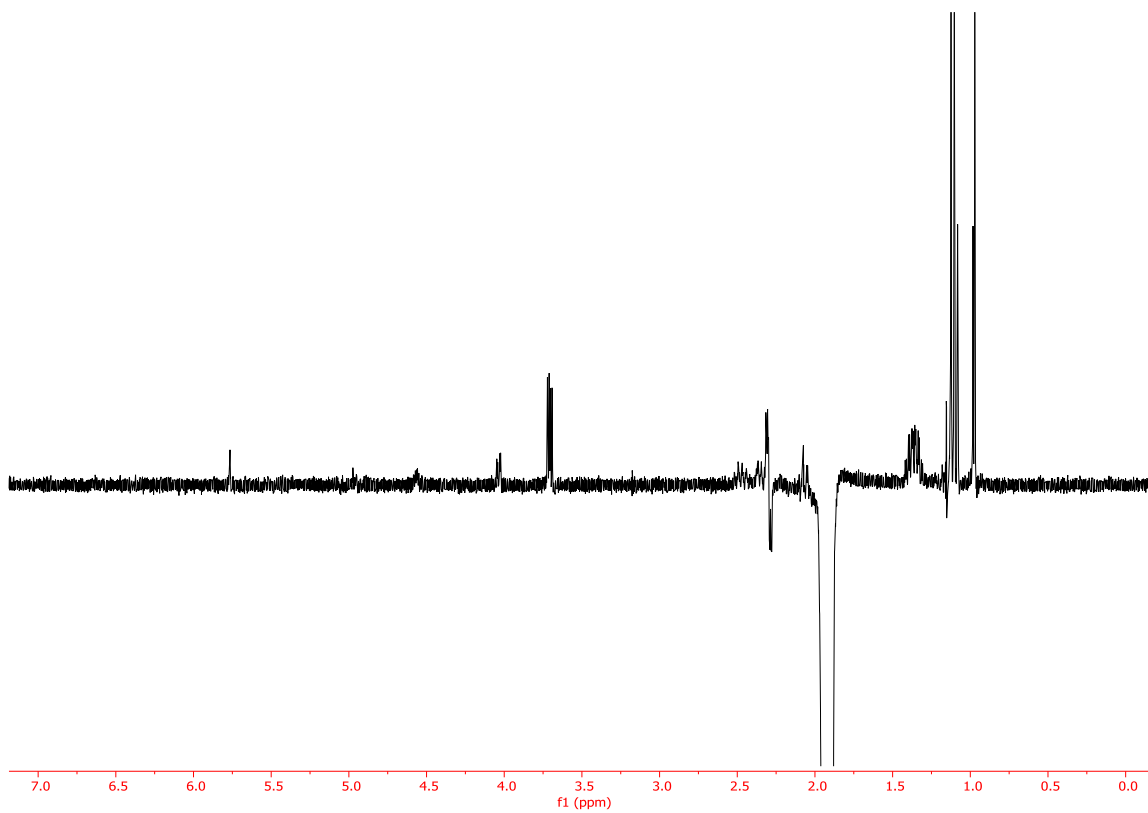
NOESY

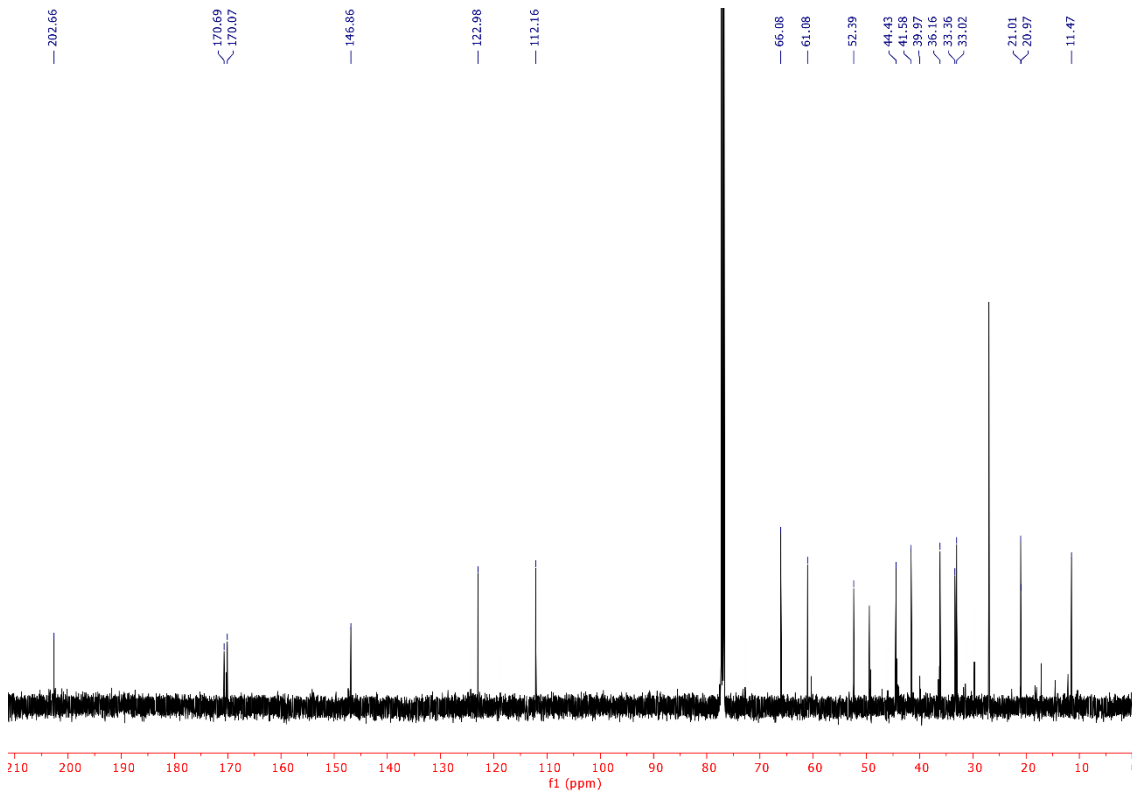
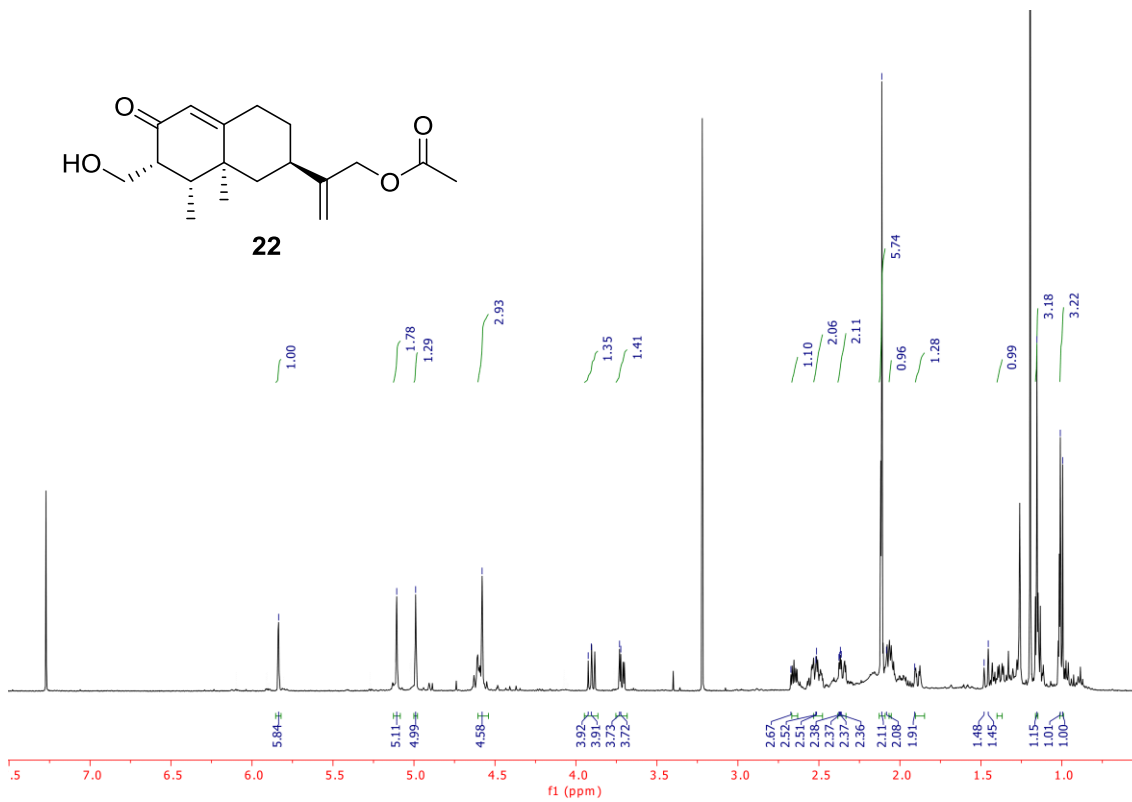
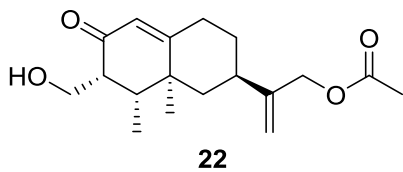


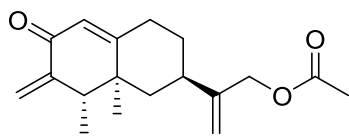
NOESY



NOESY







23

