Electronic Supplementary Materials

Efficient and selective catalytic hydroxylation of unsaturated plant oils; a novel method for producing anti-pathogens

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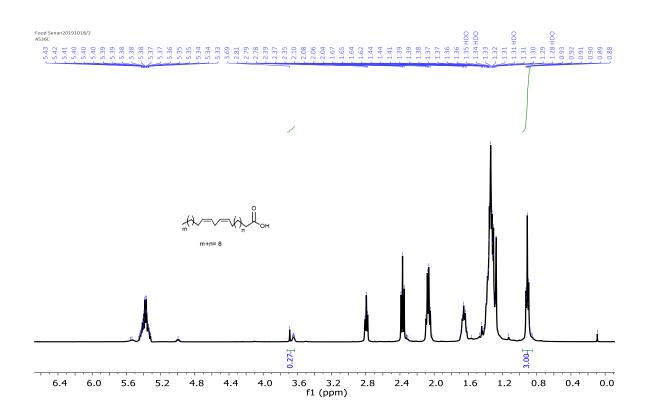


Figure S1 The quantification products by ${}^{1}H$ NMR Spectrum; Linoleic acid obtained as main product of ML hydroxylation with (Na₂S₂O₈) alone as catalyst

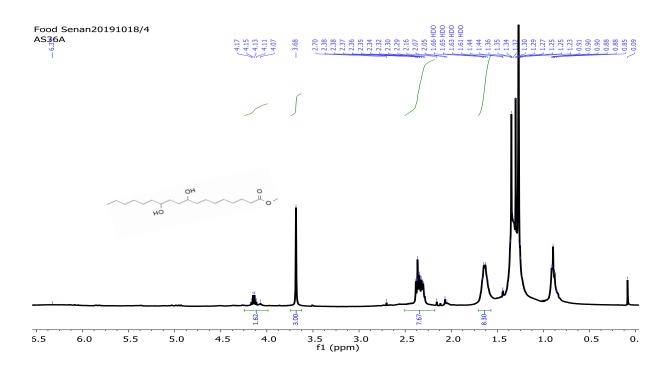
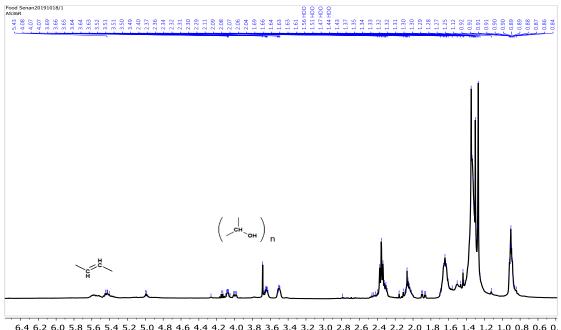


Figure S2 ¹H NMR spectrum of conjugated hydroxy methyl linoleate (isolated product 1)



6.4 6.2 6.0 5.8 5.6 5.4 5.2 5.0 4.8 4.6 4.4 4.2 4.0 3.8 3.6 3.4 3.2 3.0 2.8 2.6 2.4 2.2 2.0 1.8 1.6 1.4 1.2 1.0 0.8 0.6 0. f1 (ppm)

Figure S3 ¹H NMR spectrum of conjugated hydroxy methyl linoleate CHLM (Reaction Mixture),

n=5

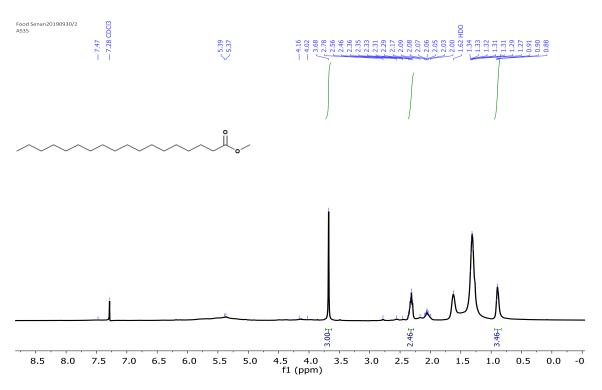


Figure S4 ¹H NMR Spectrum of Saturated Ester

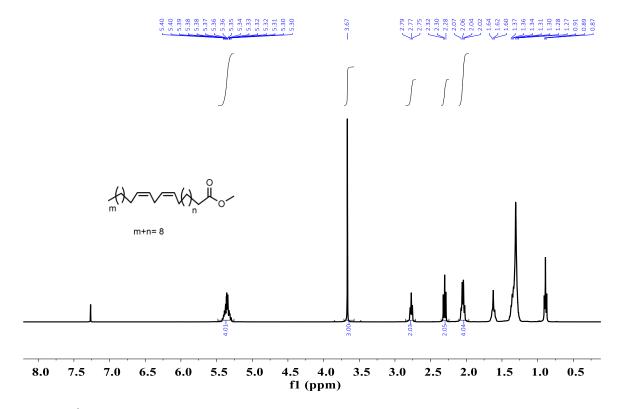


Figure S5 ¹H NMR spectrum of original methyl linoleate

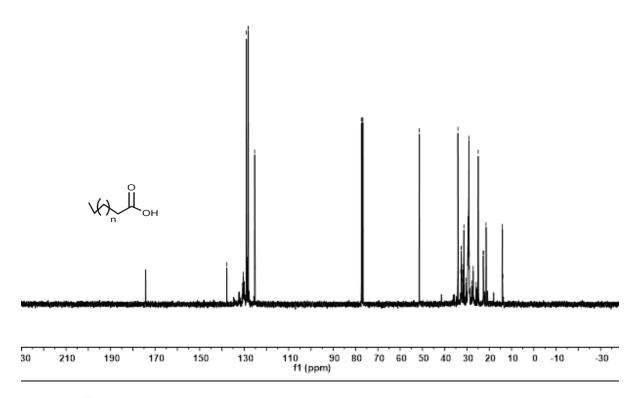


Figure S6 ¹³C NMR spectrum of isolated product in CDCl₃ (after removal of the solvent MeCN/H₂O)

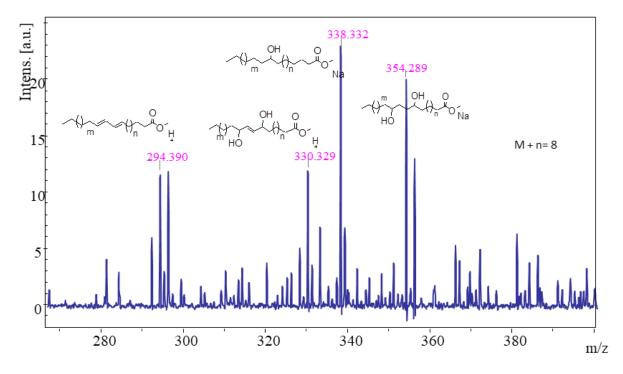


Figure S7. MALDITOF –mass spectroscopy employed for determining the mixture of conjugated hydroxy methyl linoleate CHML after reaction time 24 h