

# Application of Plant Surfactants as Cleaning Agents in Shampoo Formulations

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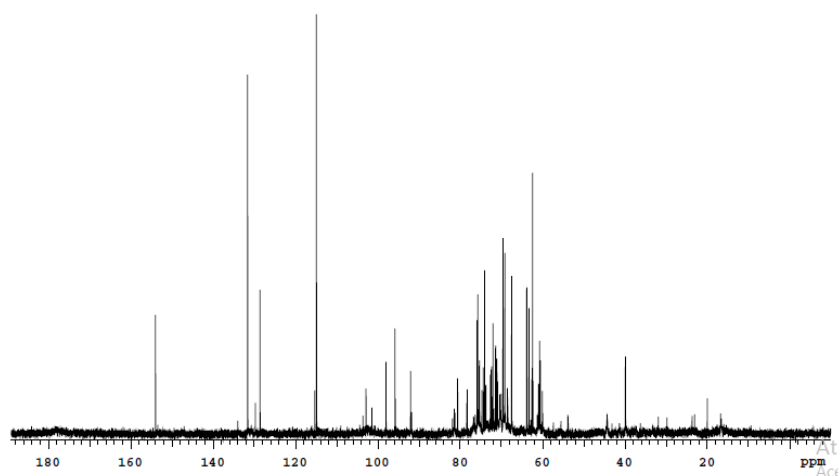
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**Figure S1.**  $^{13}\text{C}$  NMR spectrum ( $\text{D}_2\text{O}$ , 300 MHz) of standard saponin from Sigma.

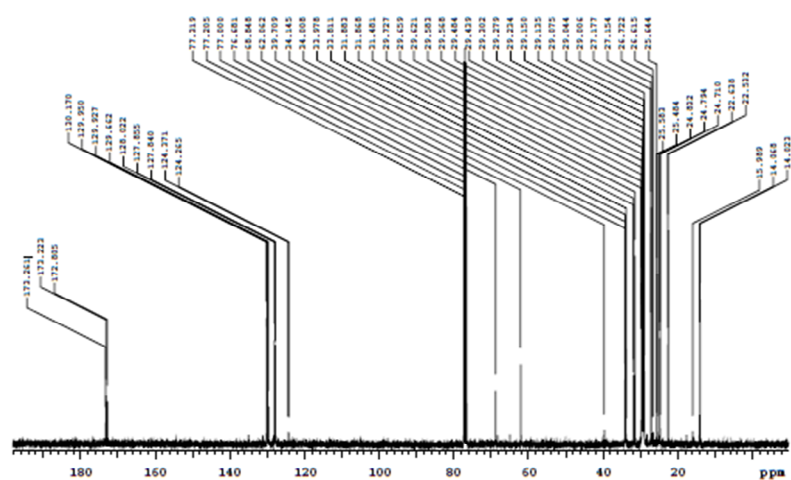


Figure S2.  $^{13}\text{C}$  NMR spectrum ( $\text{CDCl}_3$ , 300 MHz) of saponin from *Chenopodium quinoa*.

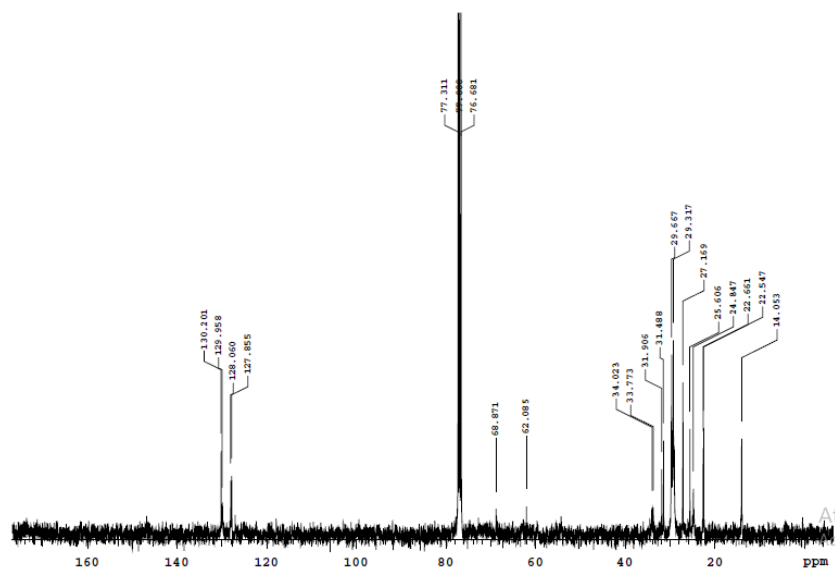


Figure S3.  $^{13}\text{C}$  NMR spectrum ( $\text{CDCl}_3$ , 300 MHz) of saponin from *Glycine max*.

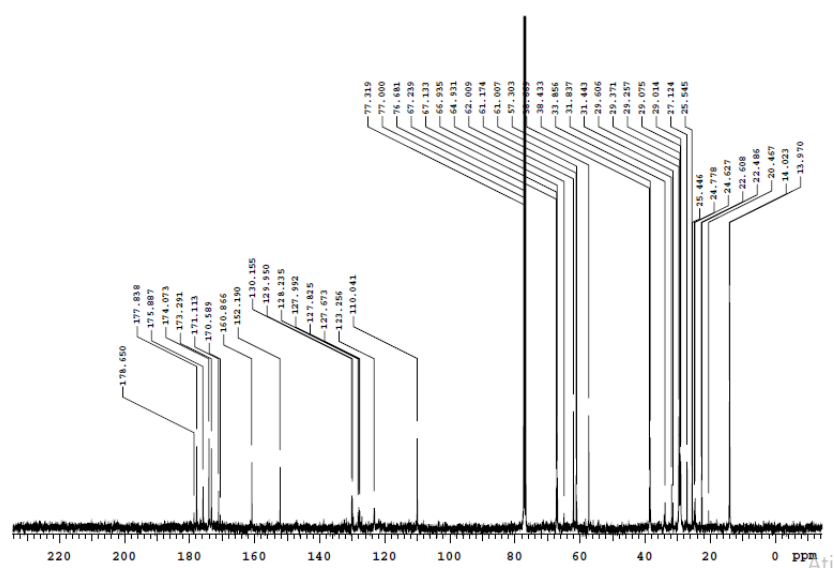


Figure S4.  $^{13}\text{C}$  NMR spectrum ( $\text{CDCl}_3$ , 300 MHz) of saponin from *Malpighia emarginata*.