Supporting Information for

Discrimination of *Lycium chinense* and *L. barbarum* Based on Metabolite Analysis and Hepatoprotective Activity

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Figure S1. ^{1}H NMR spectrum of 4-[formyl-5-(hydroxymethyl)-1*H*-pyrrol-1-yl]butanoic acid (**1**) in CD_3OD-d_4.

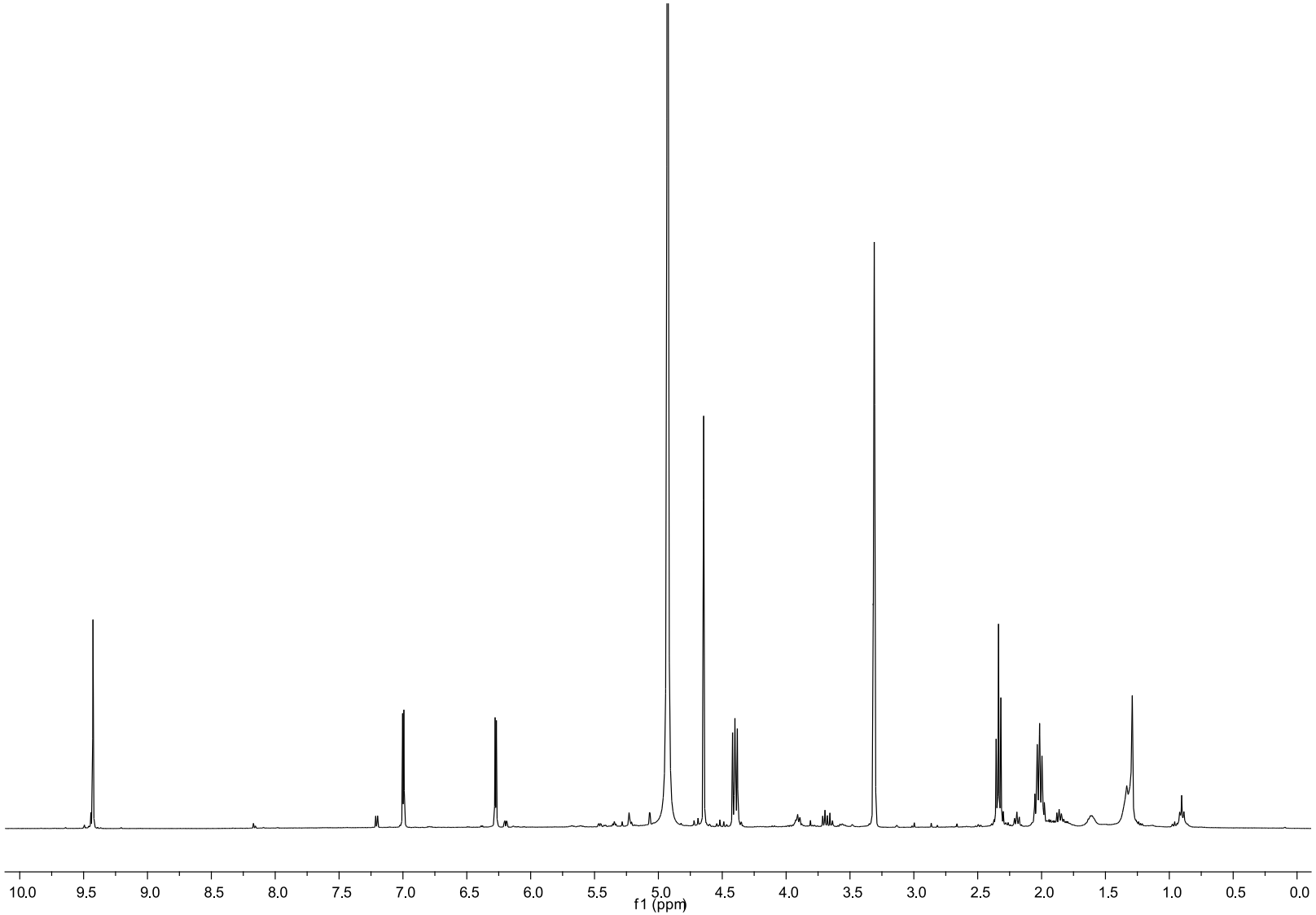

Figure S2. ^{13}C NMR spectrum of 4-[formyl-5-(hydroxymethyl)-1*H*-pyrrol-1-yl]butanoic acid (**1**) in CD_3OD-d_4

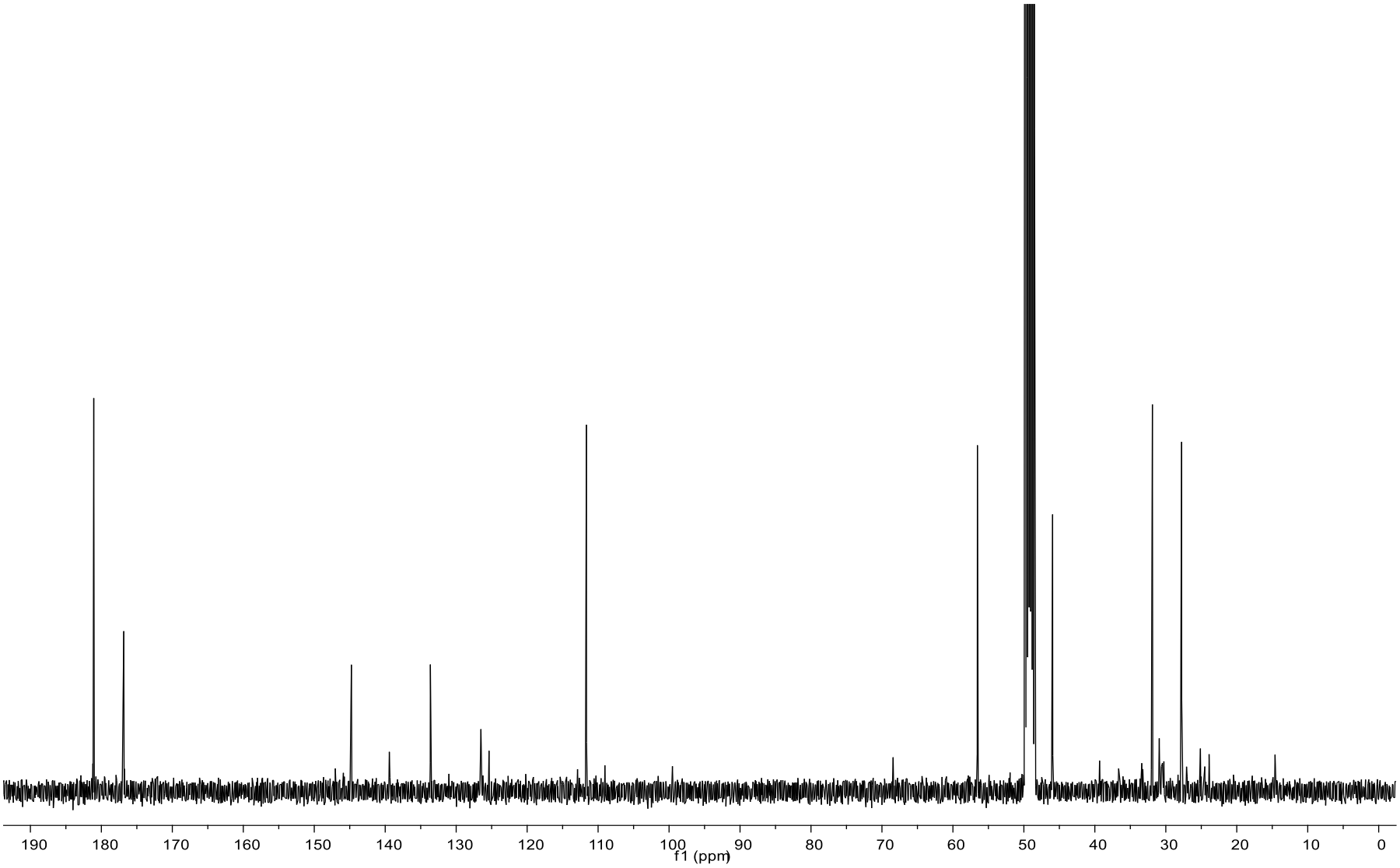

Figure S3. ^{1}H NMR spectrum of *p*-coumaric acid (**2**) in CD_3OD-d_4

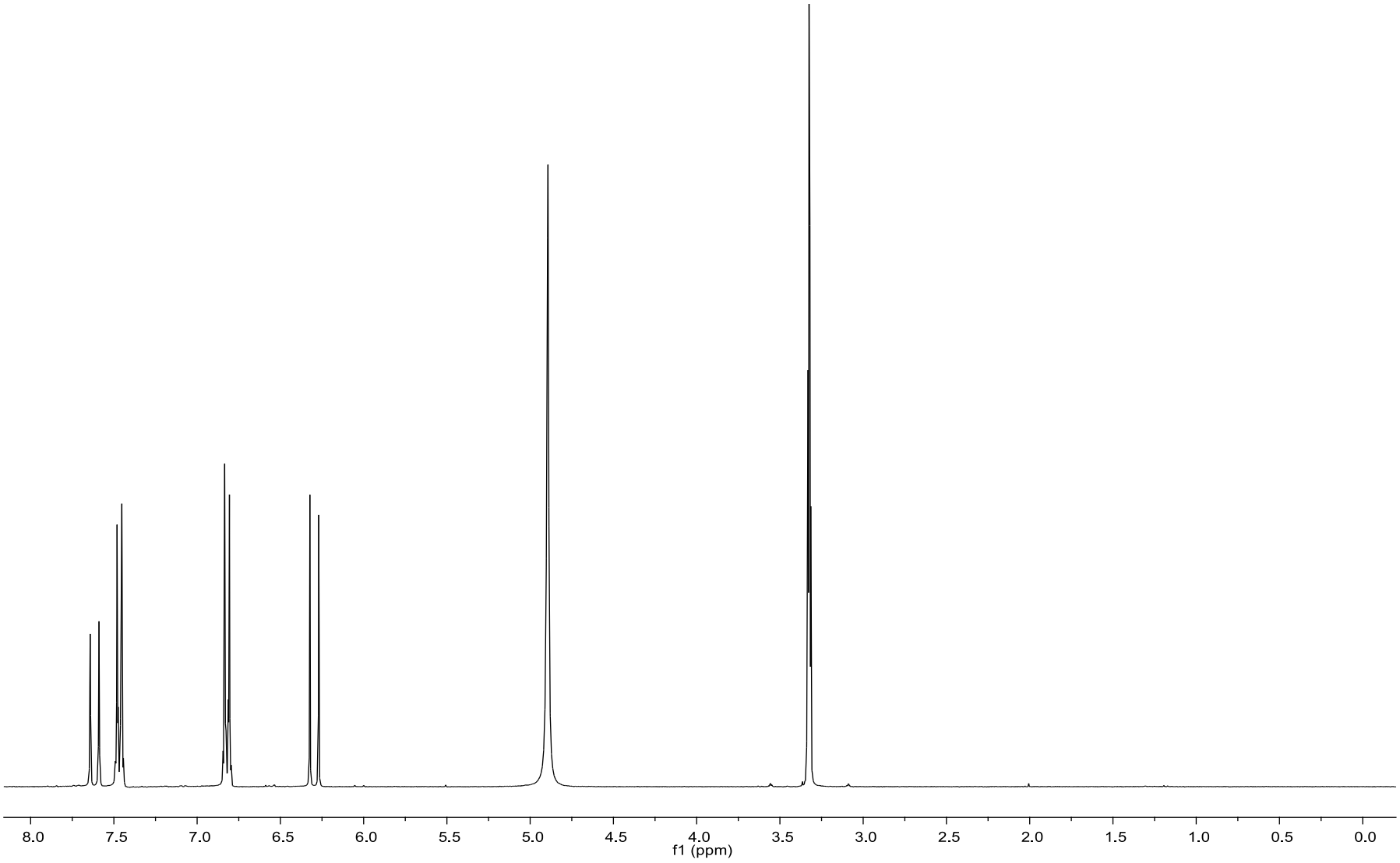

Figure S4. ^{13}C NMR spectrum of *p*-coumaric acid (**2**) in CD_3OD-d_4

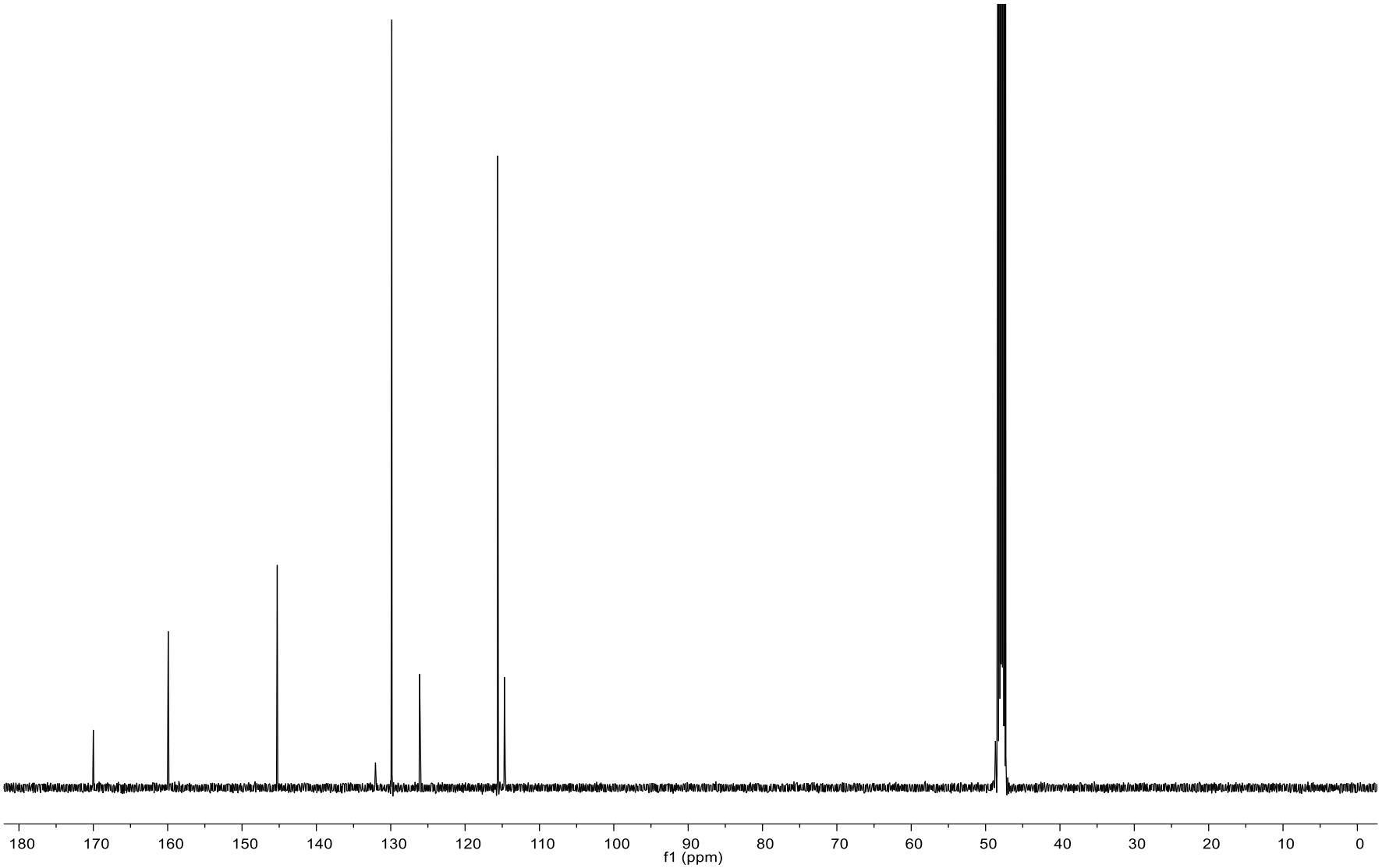

Figure S5. Commercially available Lycii Fructus of *L.chinense* and *L. barbarum*. (12 samples of two *Lycium* spp.)

Figure S6. LC Chromatogram of Lycii Fructus of *L.chinense* and *L. barbarum*. Numbers corresponding sample number of Figure S5. Each peaks were identified as 4-(2-formyl-5-(hydroxymethyl)-1*H*-pyrrol-1-yl)butanoic acid (**1**) and *p*-coumaric acid (**2**).