

## Alpha-glucosidase and Alpha-amylase Inhibitors Derived from Naturally Occurring Prenylated Isoflavones

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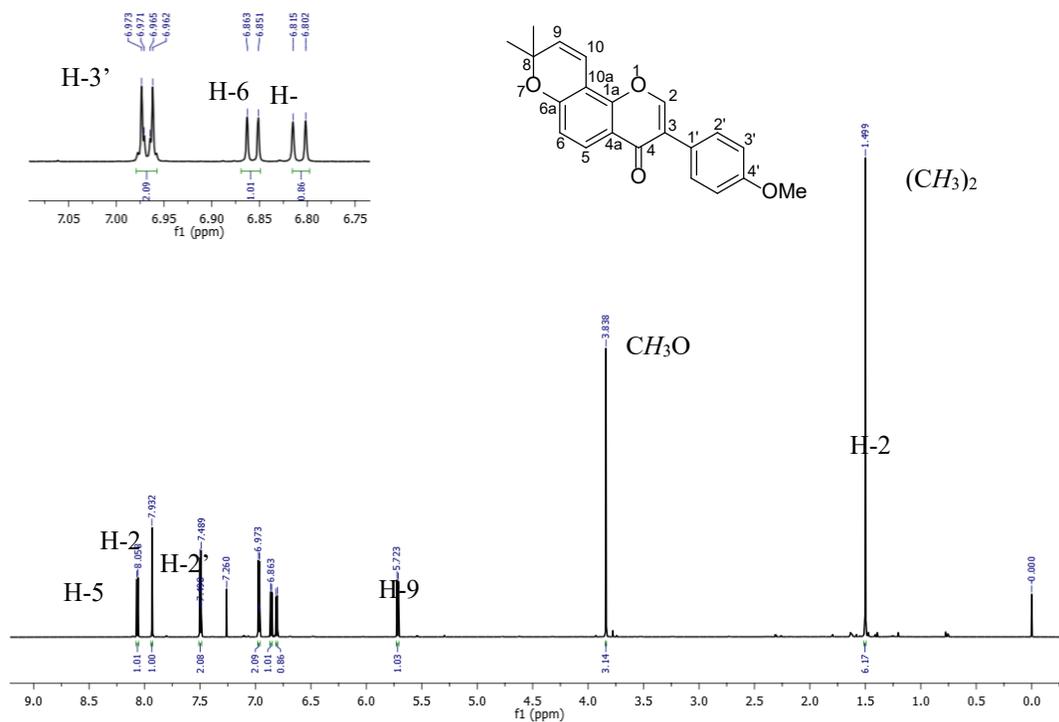
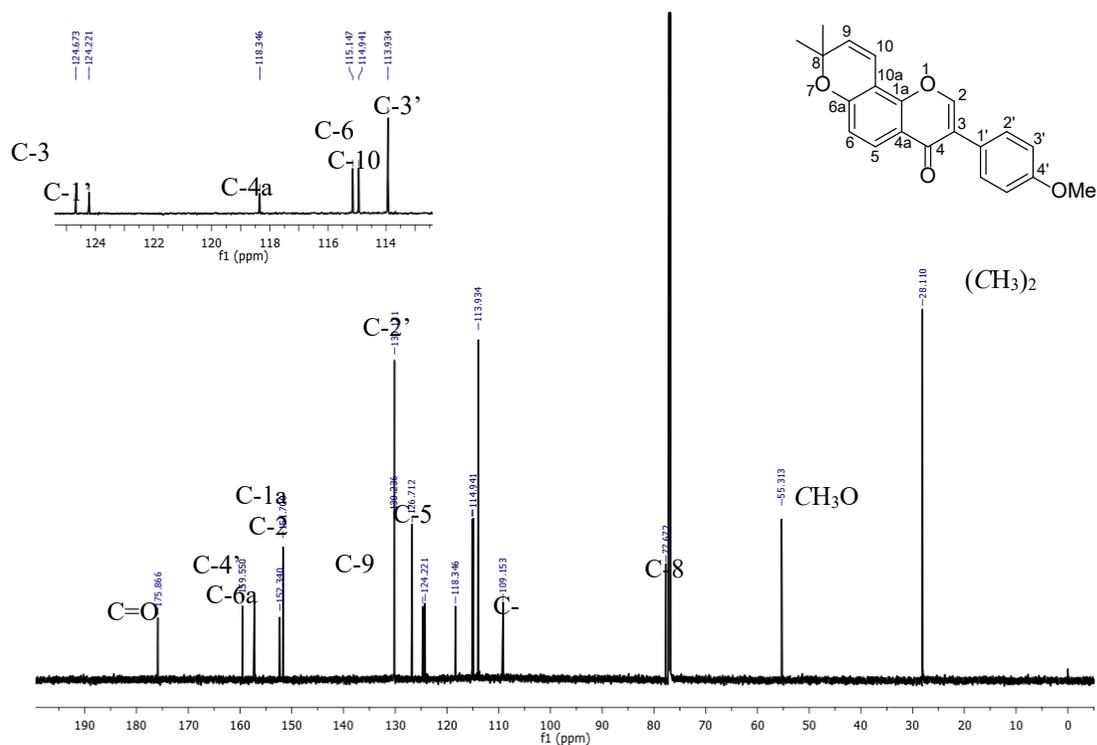
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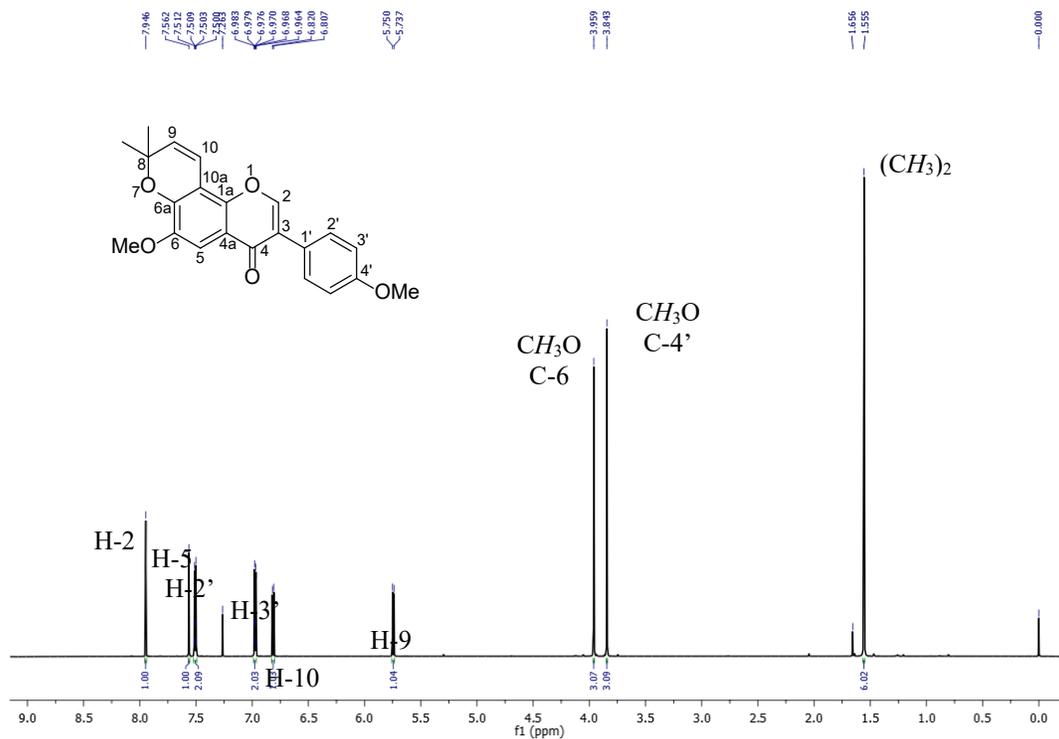
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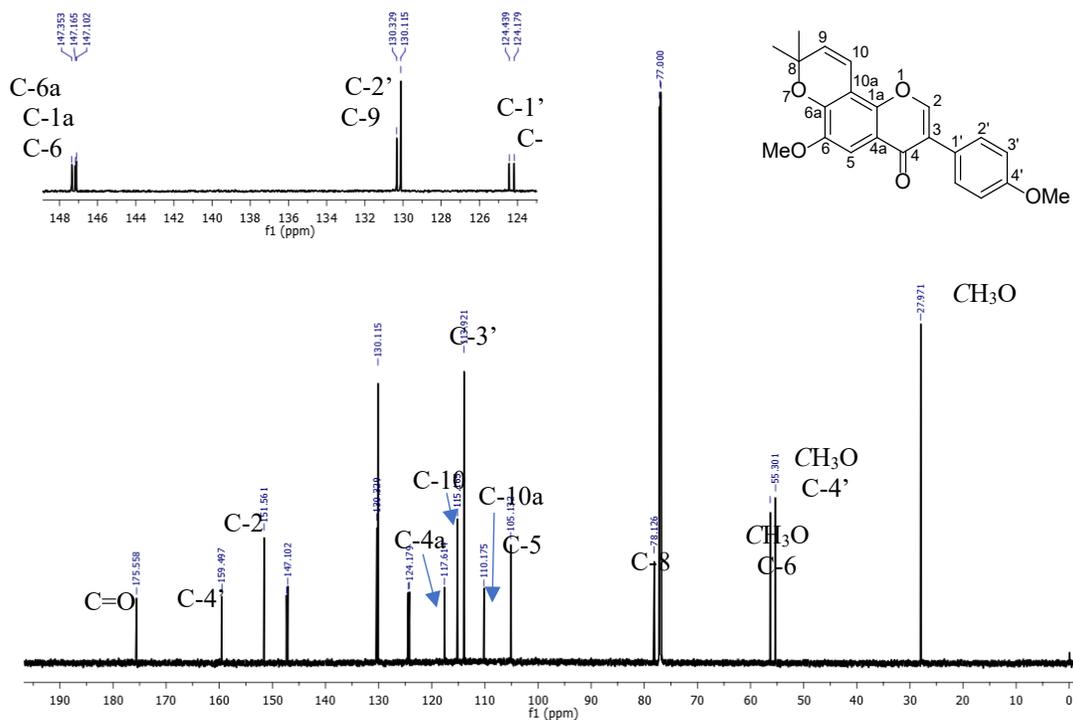
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## Supplementary Information

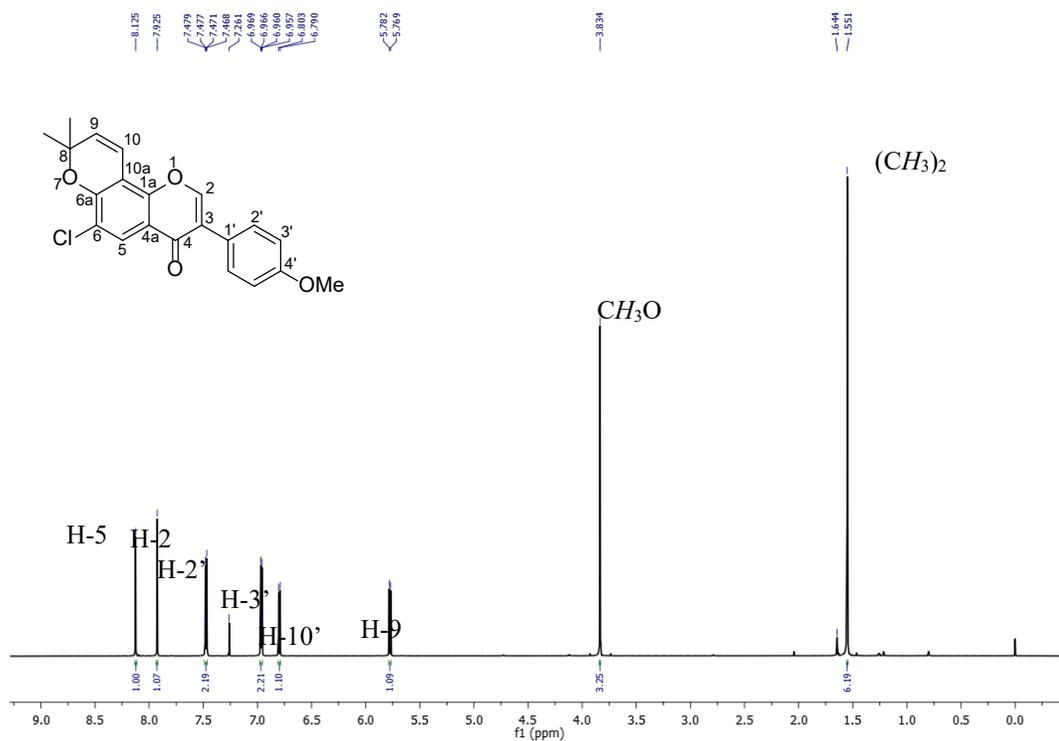
Fig. S1.  $^1\text{H-NMR}$  spectra of compound **3a** (750 MHz,  $\text{CDCl}_3$ ).Fig. S2.  $^{13}\text{C-NMR}$  spectra of compound **3a** (187.5 MHz,  $\text{CDCl}_3$ ).



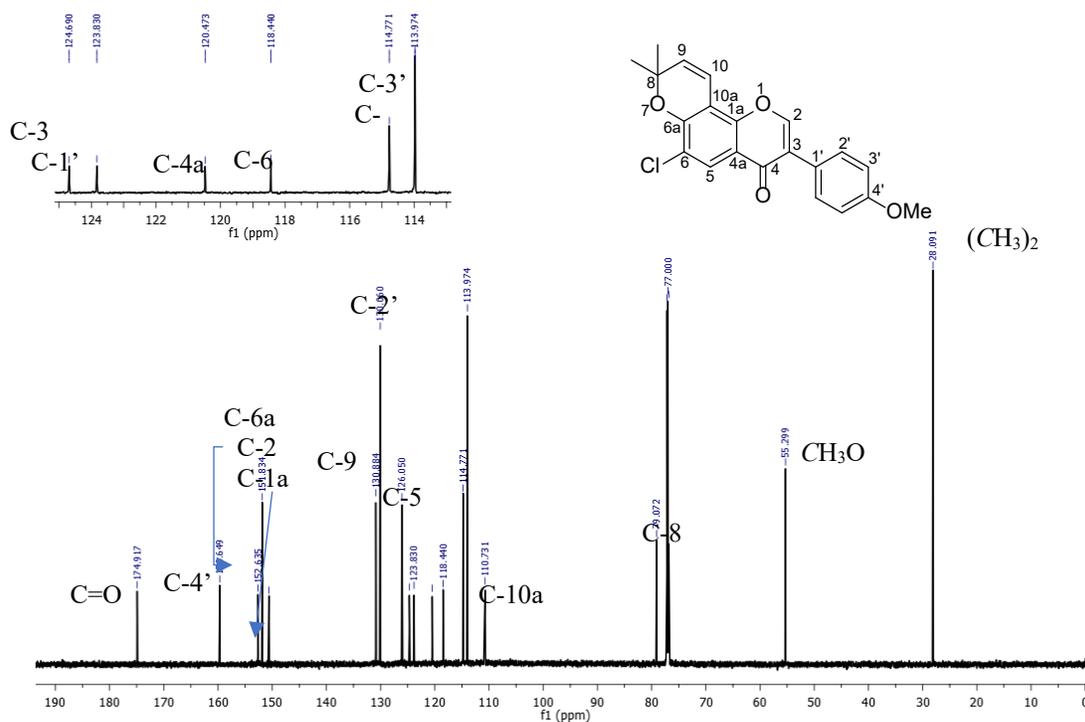
**Fig. S3.**  $^1\text{H-NMR}$  spectra of compound **3b** (750 MHz,  $\text{CDCl}_3$ ).



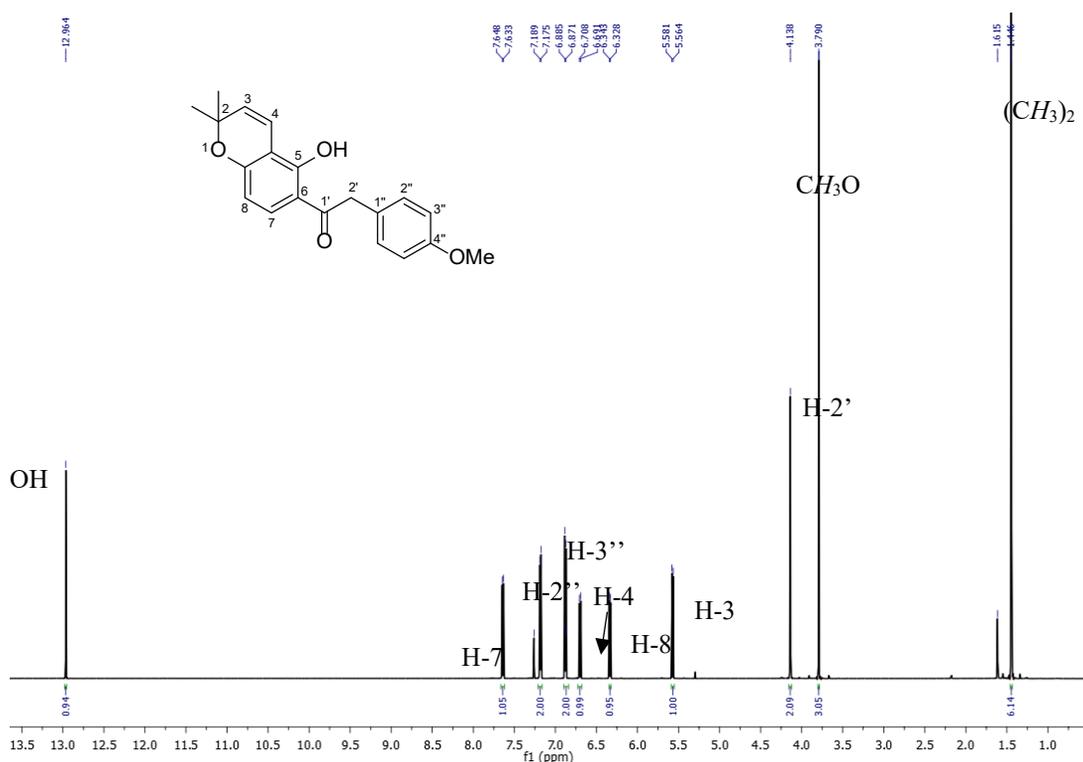
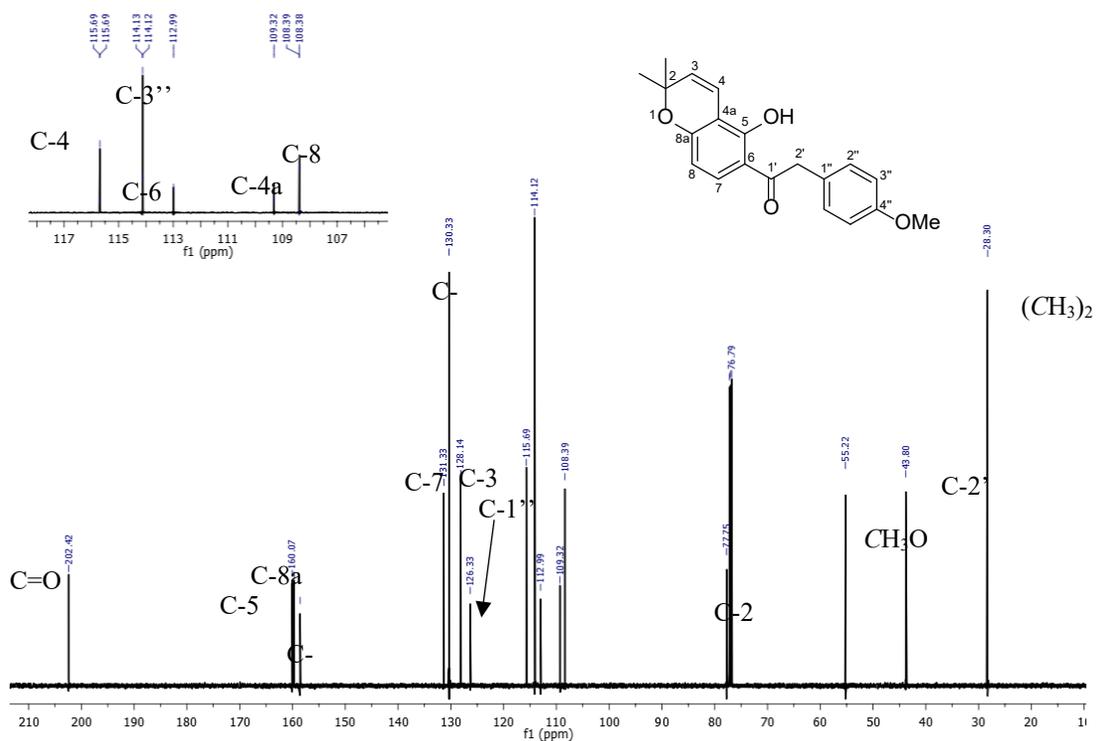
**Fig. S4.**  $^{13}\text{C-NMR}$  spectra of compound **3b** (187.5 MHz,  $\text{CDCl}_3$ ).

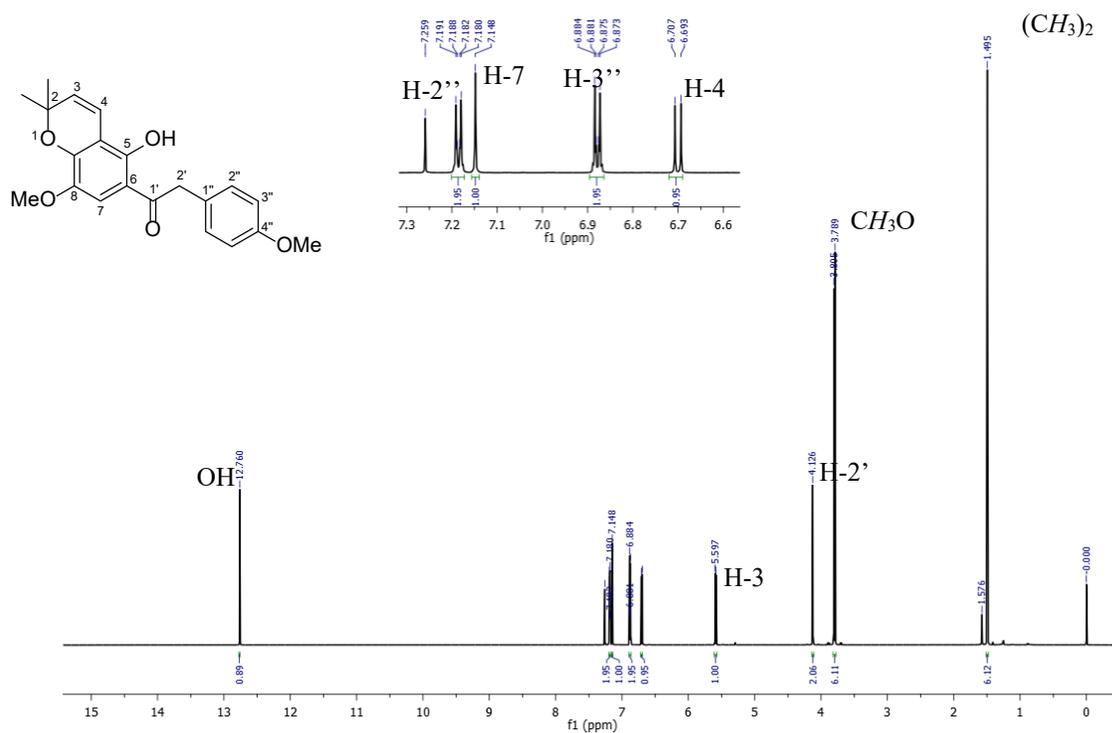
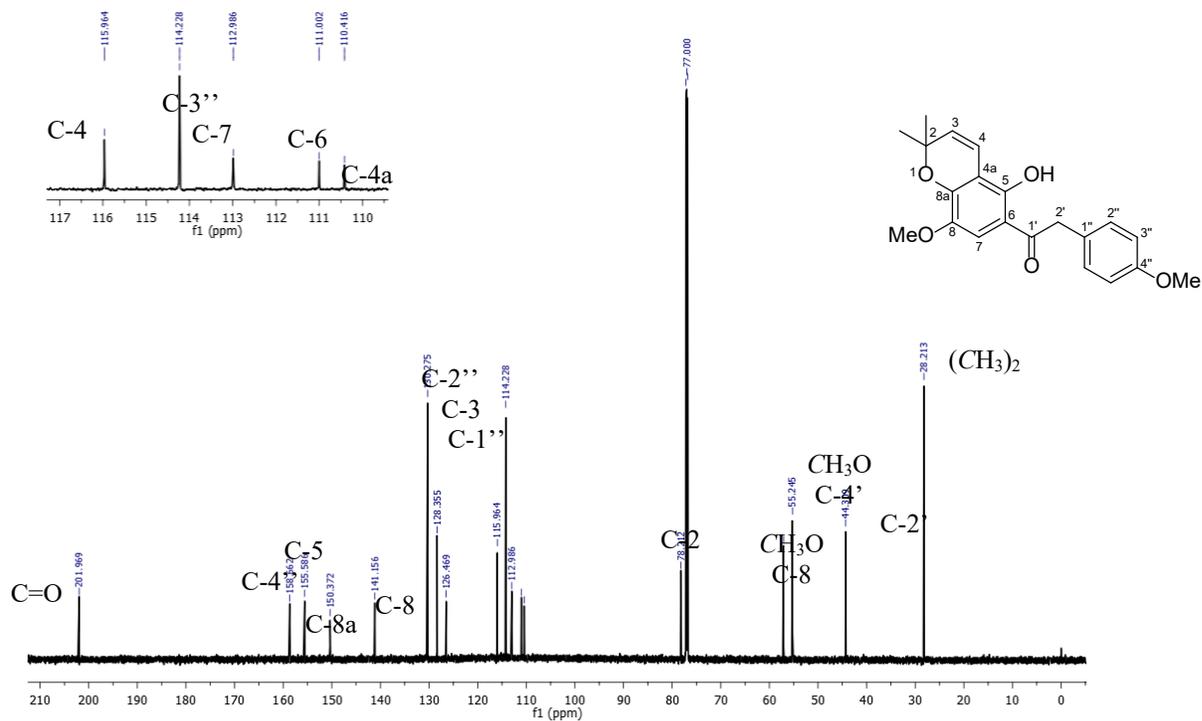


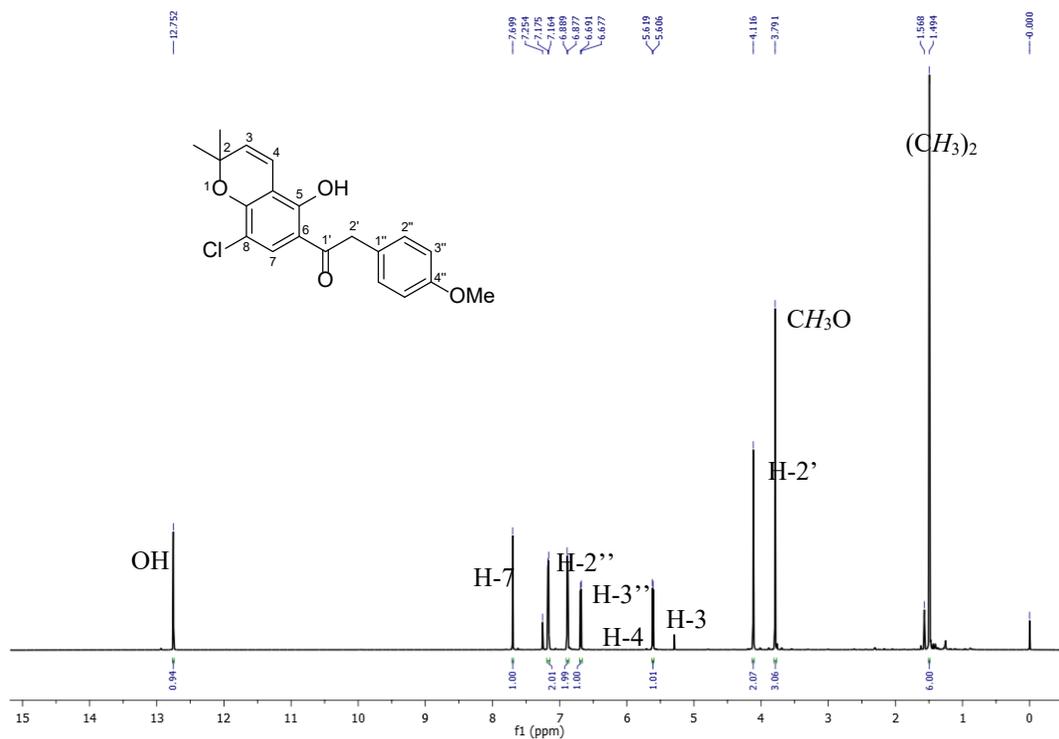
**Fig. S5.** <sup>1</sup>H-NMR spectra of compound **3c** (750 MHz, CDCl<sub>3</sub>).



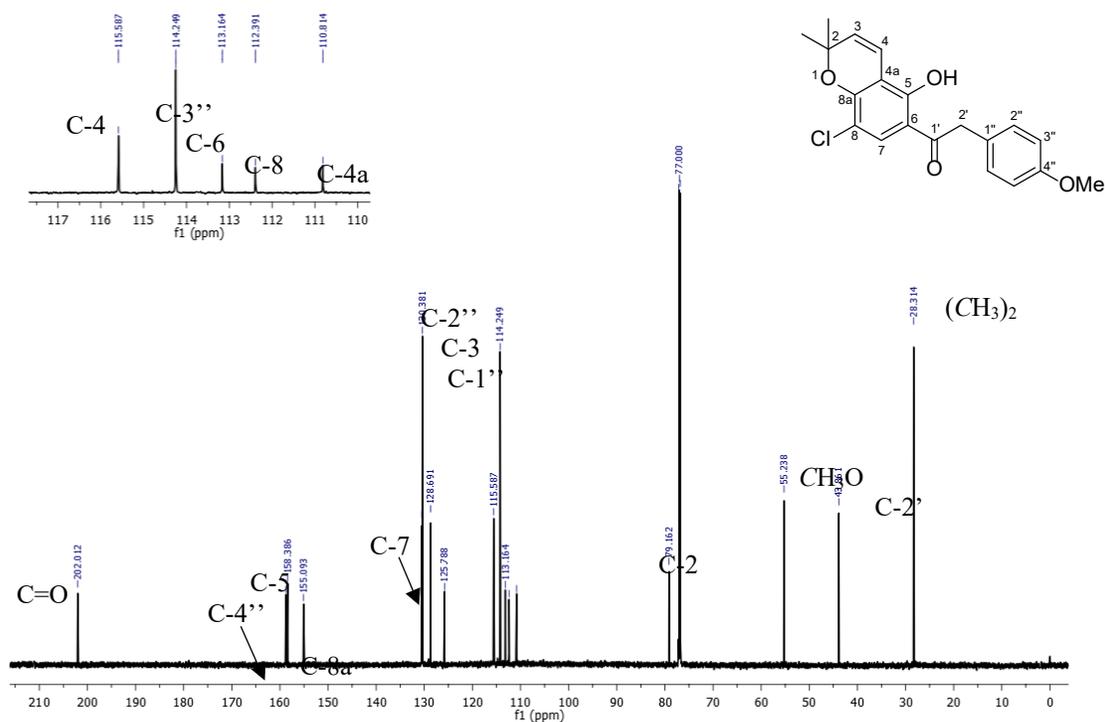
**Fig. S6.** <sup>13</sup>C-NMR spectra of compound **3c** (187.5 MHz, CDCl<sub>3</sub>).

Fig. S7. <sup>1</sup>H-NMR spectra of compound 4a (750 MHz, CDCl<sub>3</sub>).Fig. S8. <sup>13</sup>C-NMR spectra of compound 4a (187.5 MHz, CDCl<sub>3</sub>).

Fig. S9. <sup>1</sup>H-NMR spectra of compound **4b** (750 MHz, CDCl<sub>3</sub>).Fig. S10. <sup>13</sup>C-NMR spectra of compound **4b** (187.5 MHz, CDCl<sub>3</sub>).



**Fig. S11.**  $^1\text{H-NMR}$  spectra of compound **4c** (750 MHz,  $\text{CDCl}_3$ ).



**Fig. S12.**  $^{13}\text{C-NMR}$  spectra of compound **4c** (187.5 MHz,  $\text{CDCl}_3$ ).

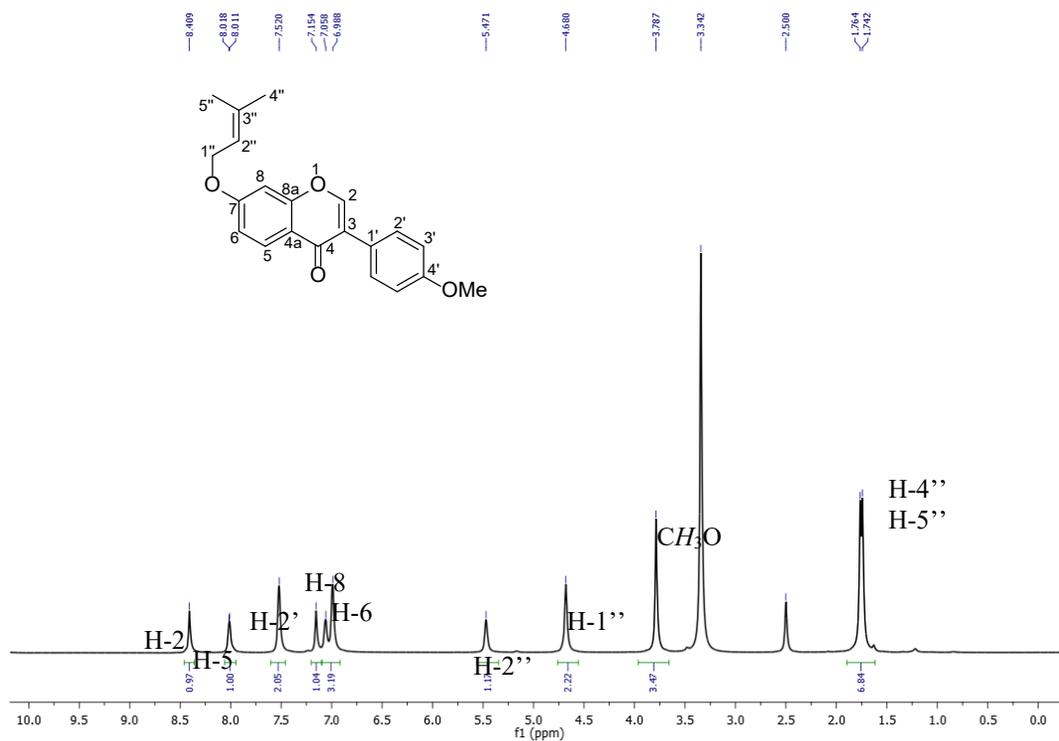


Fig. S13. <sup>1</sup>H-NMR spectra of compound **5a** (750 MHz, DMSO-*d*<sub>6</sub>).

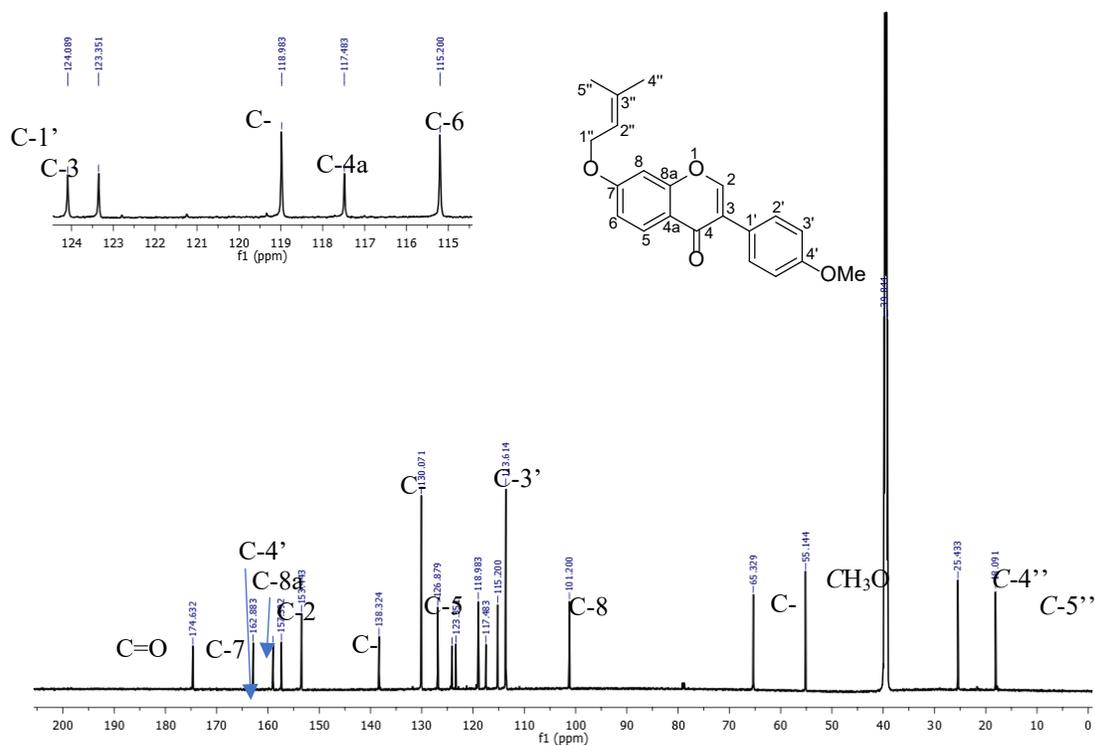
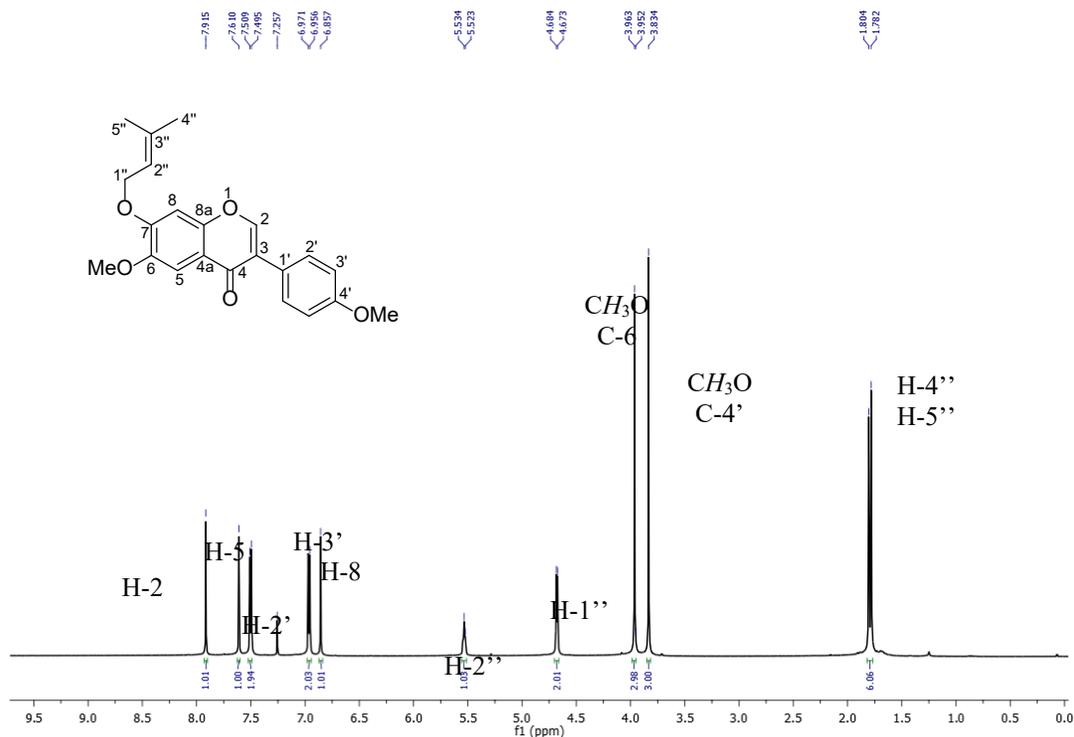
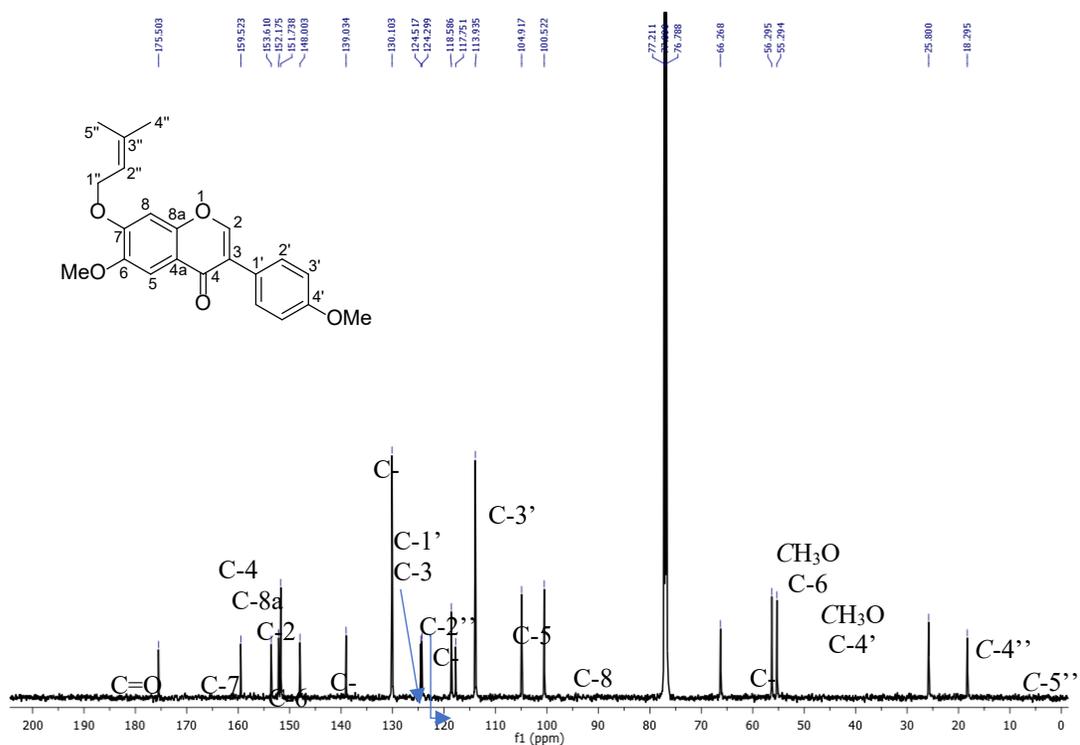


Fig. S14. <sup>13</sup>C-NMR spectra of compound **5a** (187.5 MHz, DMSO-*d*<sub>6</sub>).

Fig. S15. <sup>1</sup>H-NMR spectra of compound **5b** (600 MHz, CDCl<sub>3</sub>).Fig. S16. <sup>13</sup>C-NMR spectra of compound **5b** (150 MHz, CDCl<sub>3</sub>).

