Supplementary materials

Chemical Constituents and Biological Activities of Euphorbia paralias: Phytochemical,

Quantum Chemical, and Molecular Docking Studies

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Table of Contents

Figure S1: ¹H NMR (500 MHz) spectrum of β -sitosterol-3-O- β -D-glucoside (1) in C₅D₅N

Figure S1a: Expanded ¹H NMR (500 MHz) spectrum of β -sitosterol-3-O- β -D-glucoside (1) in C₅D₅N

Figure S1b: Expanded ¹H NMR (500 MHz) spectrum of β-sitosterol-3-O-β-D-glucoside (1) in C₅D₅N

Figure S2: 13 C NMR (125 MHz) spectrum of β -sitosterol-3-O- β -D-glucoside (1) in C_5D_5N

Figure S2a: Expanded ¹³C NMR (125 MHz) spectrum of β -sitosterol-3-O- β -D-glucoside (1) in C_5D_5N

Figure S2b: Expanded ^{13}C NMR (125 MHz) spectrum of $\beta\text{-sitosterol-3-}\textit{O-}\beta\text{-D-glucoside}$ (1) in C_5D_5N

Figure S3: ¹H NMR (500 MHz) spectrum of genistein-4'- β -O-D-glucopyranoside (2) and quercetin-3- β -O-D-glucoside (3) in CD₃OD

Figure S3a: Expanded ¹H NMR (500 MHz) spectrum of genistein-4'- β -O-D-glucopyranoside (2) and quercetin-3- β -O-D-glucoside (3) in CD₃OD

Figure S4: 1 H NMR (500 MHz) spectrum of kaempferol-3-O- α -D-arabinopyranoside (4) in DMSO-d6

Figure S4a: Expanded 1 H NMR (500 MHz) spectrum of kaempferol-3-O- α -D-arabinopyranoside (4) in DMSO-d6

Figure S5: 1 H NMR (500 MHz) spectrum of quercetin-3-O- α -D-arabinopyranoside (5) in DMSO-d6 Figure S5a: Expanded 1 H NMR (500 MHz) spectrum of quercetin-3-O- α -D-arabinopyranoside (5) in DMSO-d6

Figure S6: ¹H NMR (400 MHz) spectrum of genistein-8β-C-glucoside (6) in DMSO-d6

Figure S6a: Expanded ¹H NMR (400 MHz) spectrum of genistein-8β-C-glucoside (6) in DMSO-d6

Figure S7: APT ¹³C NMR (100 MHz) spectrum of genistein-8β-C-glucoside (6) in DMSO-d6

Figure S8: Edited HSQC spectrum of genistein-8β-C-glucoside (6) in DMSO-d6 in DMSO-d6

Figure S9: ¹H NMR (500 MHz) spectrum of hirsutissimiside B (7) in CD₃OD

Figure S9a: Expanded ¹H NMR (500 MHz) spectrum of hirsutissimiside B (7) in CD₃OD

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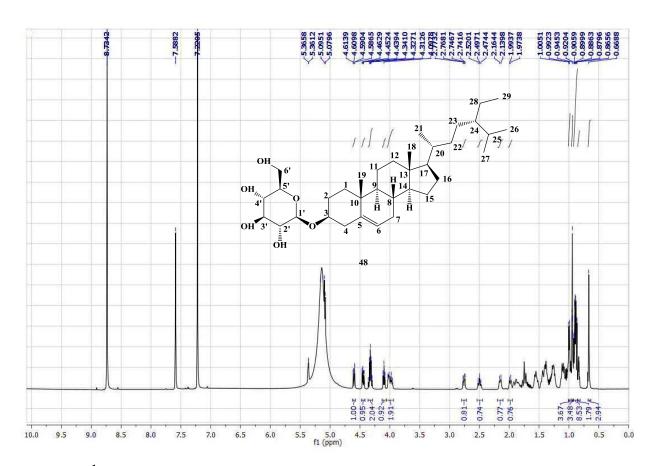


Figure S1: ¹H NMR (500 MHz) spectrum of β -sitosterol-3-O- β -D-glucoside (1) in C₅D₅N

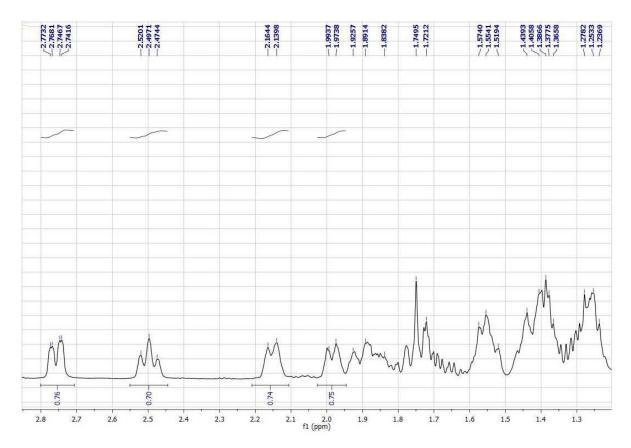


Figure S1a: Expanded 1H NMR (500 MHz) spectrum of $\beta\text{-sitosterol-3-}\textit{O-}\beta\text{-D-glucoside}$ (1) in C_5D_5N

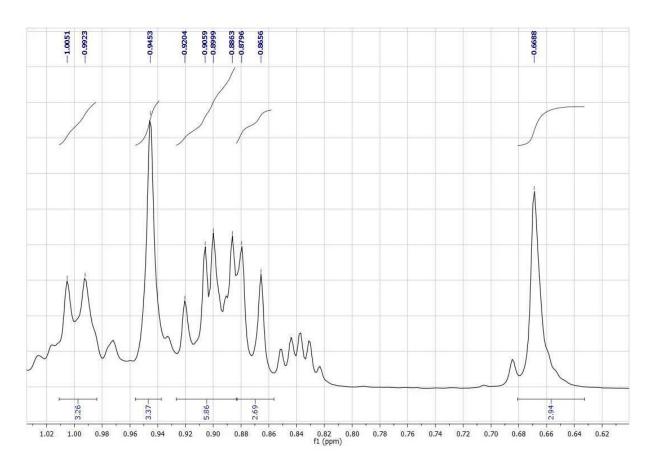


Figure S1b: Expanded 1 H NMR (500 MHz) spectrum of β -sitosterol-3-O- β -D-glucoside (1) in C_5D_5N

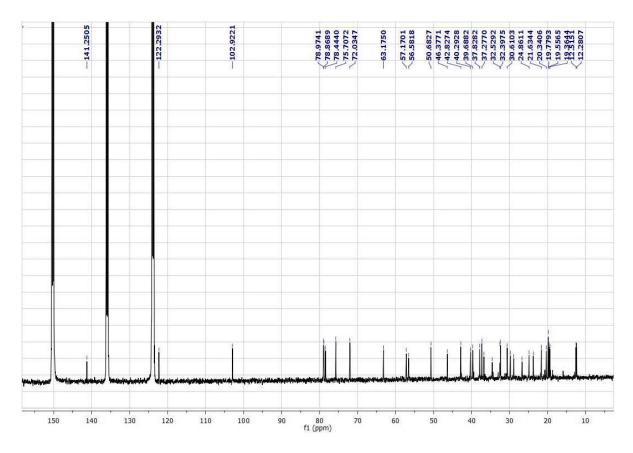


Figure S2: 13 C NMR (125 MHz) spectrum of β -sitosterol-3-O- β -D-glucoside (1) in C_5D_5N

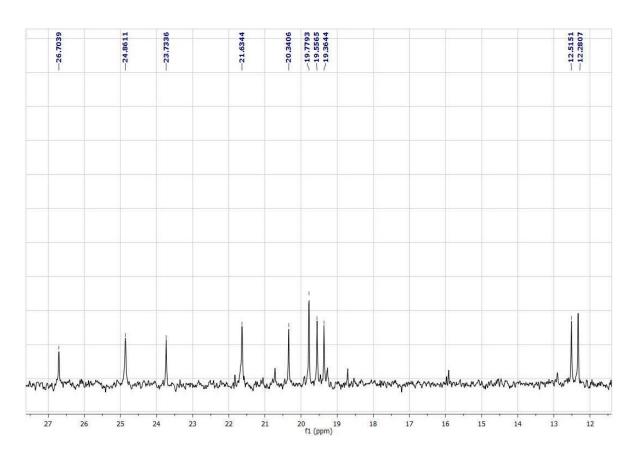


Figure S2a: Expanded ^{13}C NMR (125 MHz) spectrum of $\beta\text{-sitosterol-3-}\textit{O-}\beta\text{-D-glucoside}$ (1) in C_5D_5N

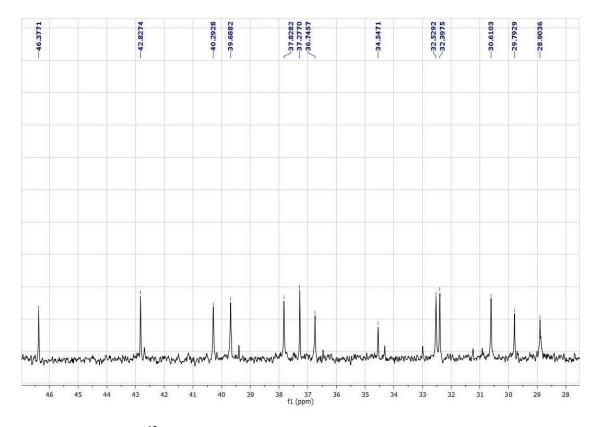


Figure S2b: Expanded ^{13}C NMR (125 MHz) spectrum of $\beta\text{-sitosterol-3-}O\text{-}\beta\text{-D-glucoside}$ (1) in C_5D_5N

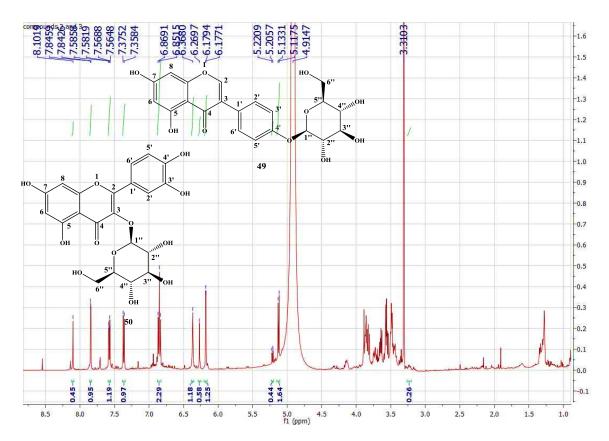


Figure S3: 1 H NMR (500 MHz) spectrum of genistein-4'- β -O-D-glucopyranoside (2) and quercetin-3- β -O-D-glucoside (3) in CD₃OD

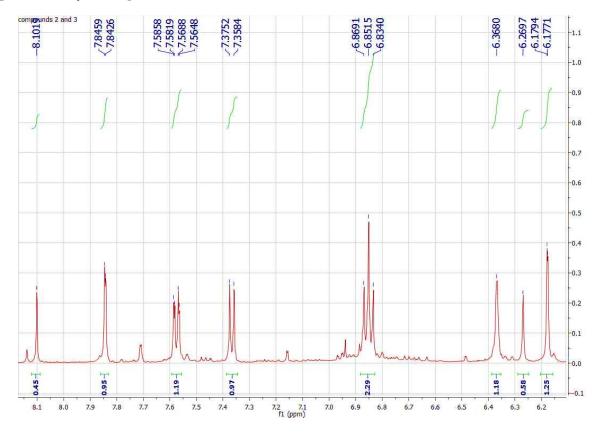


Figure S3a: Expanded ¹H NMR (500 MHz) spectrum of genistein-4'- β -O-D-glucopyranoside (2) and quercetin-3- β -O-D-glucoside (3) in CD₃OD

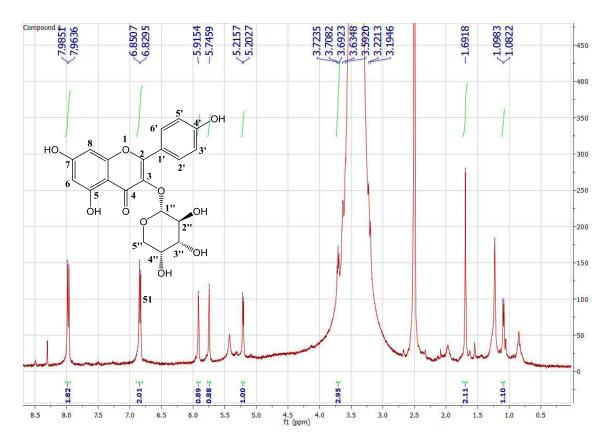


Figure S4: $^{1}\text{H NMR}$ (500 MHz) spectrum of kaempferol-3-O- α -D-arabinopyranoside (4) in DMSO-d6

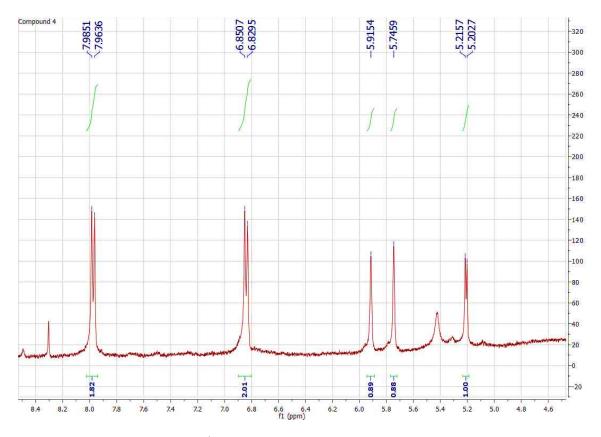


Figure S4a: Expanded 1H NMR (500 MHz) spectrum of kaempferol-3-O- α -D-arabinopyranoside (4) in DMSO-d6

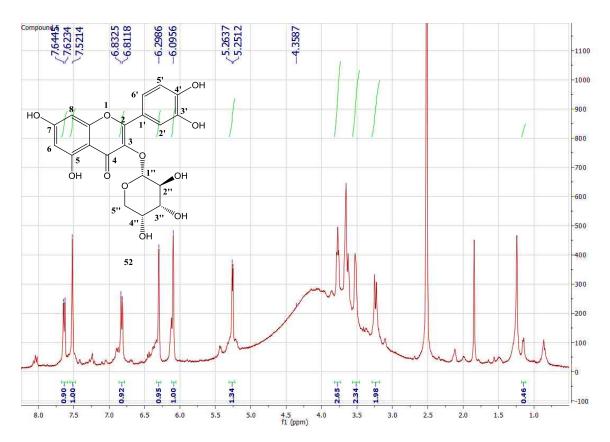


Figure S5: 1 H NMR (500 MHz) spectrum of quercetin-3-O- α -D-arabinopyranoside (5) in DMSO-d6

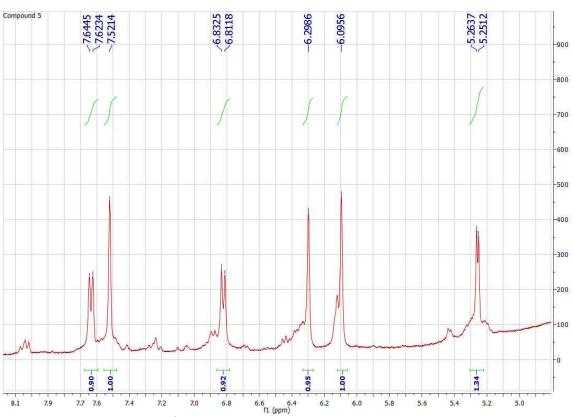


Figure S5a: Expanded 1 H NMR (500 MHz) spectrum of quercetin-3-O- α -D-arabinopyranoside (5) in DMSO-d6

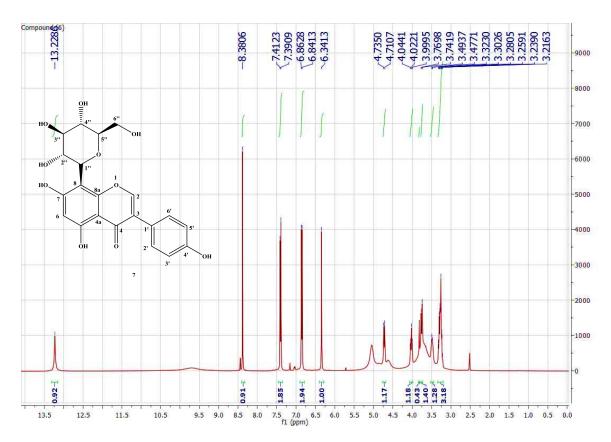


Figure S6: 1 H NMR (400 MHz) spectrum of genistein-8 β -C-glucoside (6) in DMSO-d6

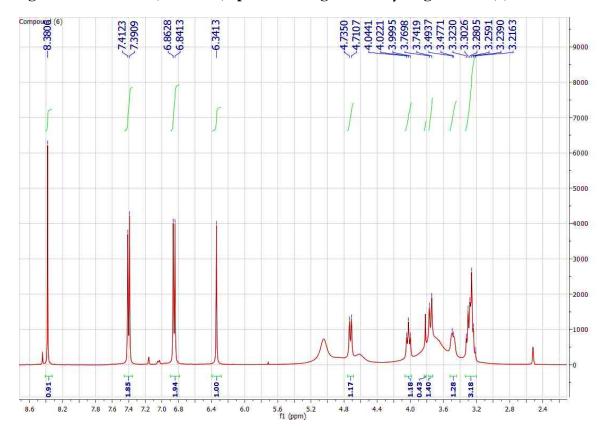


Figure S6a: Expanded $^1 H$ NMR (400 MHz) spectrum of genistein-8 β -C-glucoside (6) in DMSO-d6

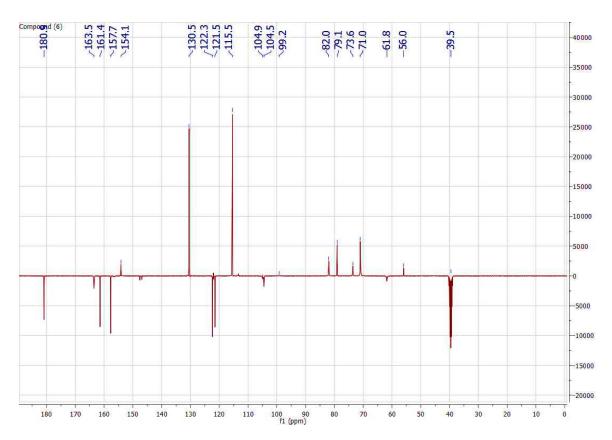


Figure S7: APT $^{13}{\rm C}$ NMR (100 MHz) spectrum of genistein-8 β -C-glucoside (6) in DMSO- d6

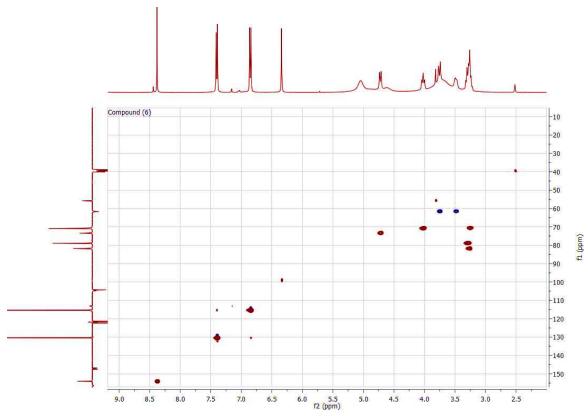


Figure S8: Edited HSQC spectrum of genistein- 8β -C-glucoside (6) in DMSO-d6 in DMSO-d6

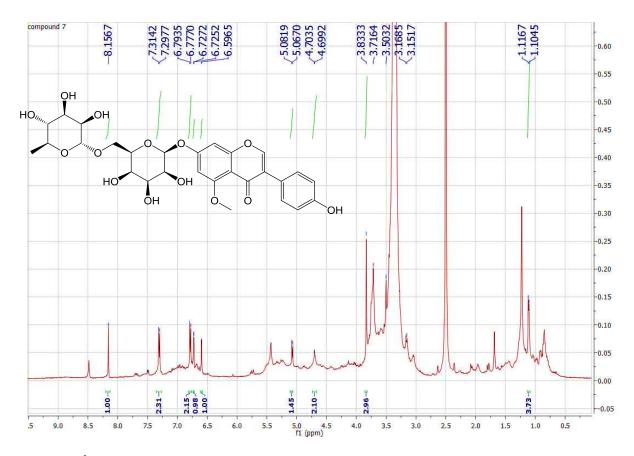


Figure S9: ^{1}H NMR (500 MHz) spectrum of hirsutissimiside B (7) in CD₃OD

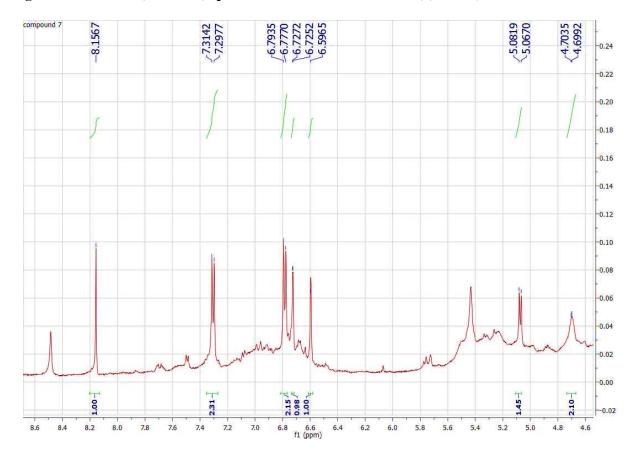


Figure S9a: Expanded ¹H NMR (500 MHz) spectrum of hirsutissimiside B (7) in CD₃OD