

Supplementary Material

Bis-bibenzyls from the liverwort *Pellia endiviifolia* and their biological activity

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Figure S1. Part of the ^1H NMR spectrum of **1** (perrottetin E) from δ_{H} 6.50-7.30 ppm

Figure S2. Part of the ^{13}C NMR spectrum of **1** (perrottetin E) from δ_{C} 112-158 ppm

Figure S3. Part of the ^{13}C NMR spectrum of **1** (perrottetin E) from δ_{C} 36.7-38.0 ppm

Figure S4. Part of the HSQC spectrum of **1** (perrottetin E) from δ_{H} 6.50-7.20 ppm and δ_{C} 112-130 ppm

Figure S5. Part of the HMBC spectrum of **1** (perrottetin E) from δ_{H} 6.50-7.2 ppm and δ_{C} 112-160 ppm

Figure S6. Part of the ^1H NMR spectrum of **2** (10'-hydroxyperrottetin E) δ_{H} 6.60-7.20 ppm

Figure S7. Part of the ^{13}C NMR spectrum of **2** (10'-hydroxyperrottetin E) from δ_{C} 112-156 ppm

Figure S8. Part of the ^{13}C NMR spectrum of **2** (10'-hydroxyperrottetin E) from δ_{C} 32-38 ppm

Figure S9. Part of the COSY spectrum of **2** (10'-hydroxyperrottetin E) from δ_{H} 6.50-7.30 ppm

Figure S10. Part of the HSQC spectrum of **2** (10'-hydroxyperrottetin E) from δ_{H} 6.55-7.20 ppm and δ_{C} 112-131 ppm

Figure S11. Part of the HMBC spectrum of **2** (10'-hydroxyperrottetin E) from δ_{H} 6.55-7.20 ppm and δ_{C} 112-156 ppm

Figure S12. Part of the ^1H NMR spectrum of **3** (10,10'-dihydroxyperrottetin E) from δ_{H} 4.80-7.20 ppm

Figure S13. Part of the ^{13}C NMR spectrum of **3** (10,10'-dihydroxyperrottetin E) from δ_{C} 112-157 ppm

Figure S14. Part of the COSY spectrum of **3** (10,10'-dihydroxyperrottetin E) from δ_{H} 6.50-7.30 ppm

Figure S15. Part of the HSQC spectrum of **3** (10,10'-dihydroxyperrottetin E) from δ_{H} 6.40-7.15 ppm and δ_{C} 112-130 ppm

Figure S16. Part of the HMBC spectrum of **3** (10,10'-dihydroxyperrottetin E) from δ_{H} 6.40-7.15 ppm and δ_{C} 112-156 ppm

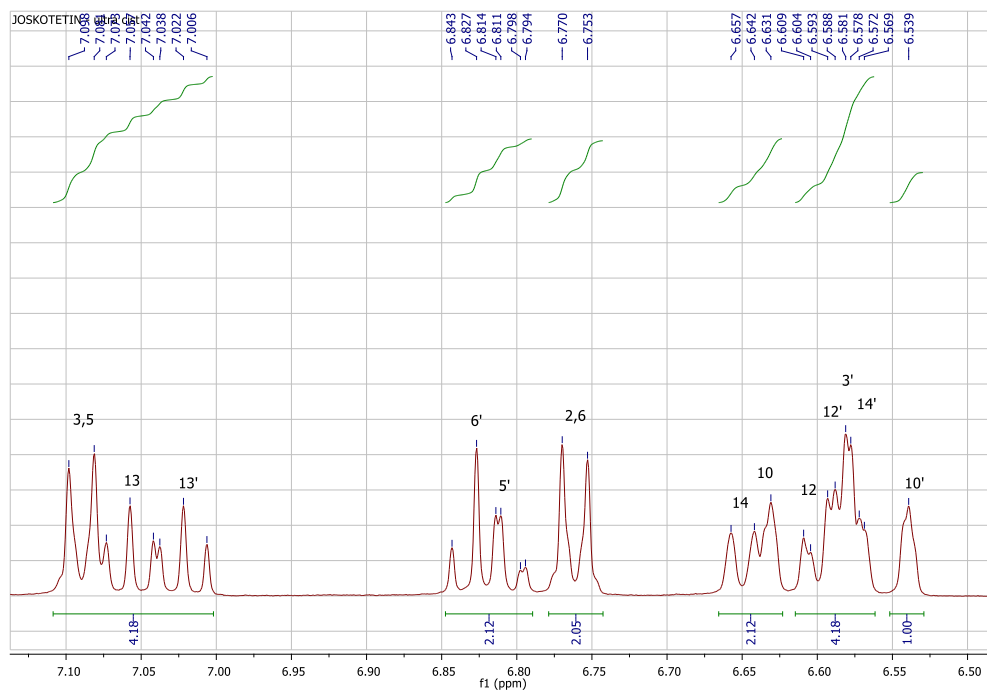


Figure S1. Part of the ^1H NMR spectrum of **1** (perrottetin E) from δ_{H} 6.50-7.30 ppm

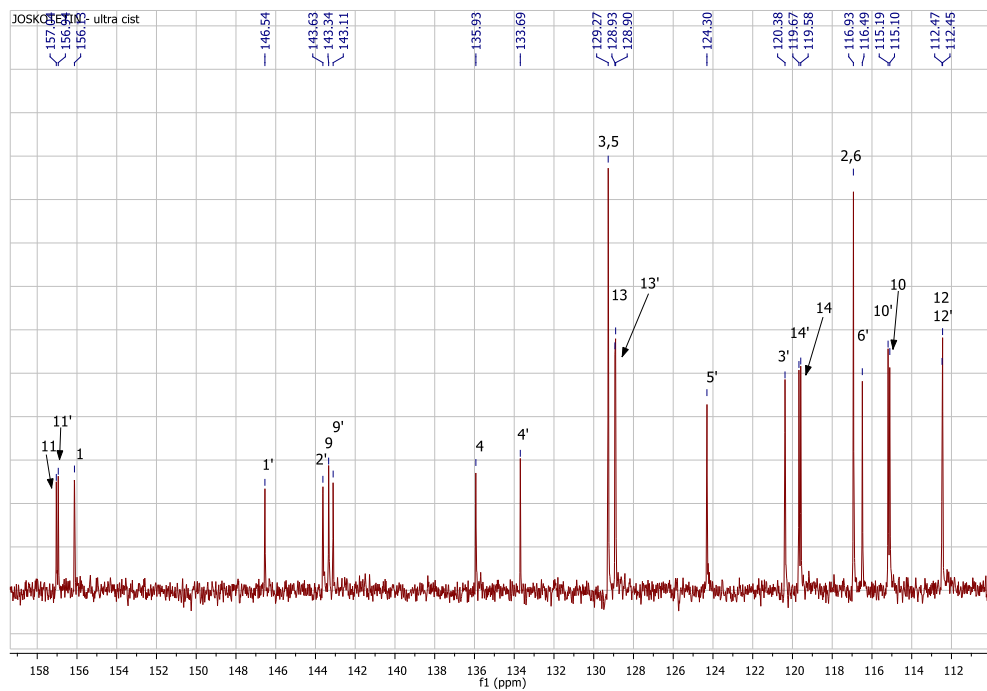


Figure S2. Part of the ^{13}C NMR spectrum of **1** (perrottetin E) from δ_{C} 112-158 ppm

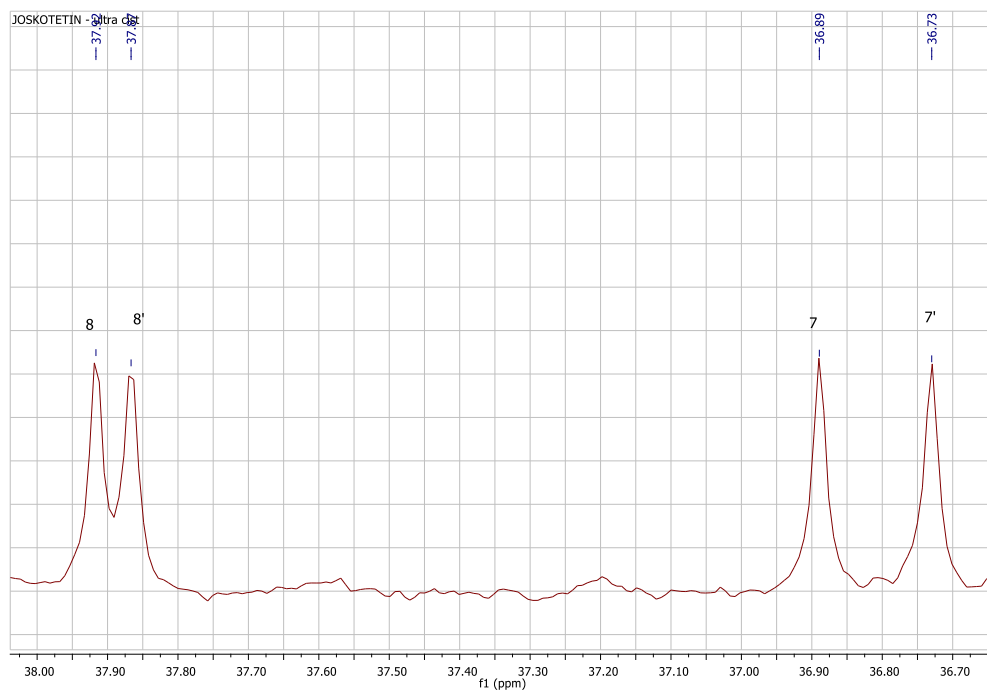


Figure S3. Part of the ^{13}C NMR spectrum of **1** (perrottetin E) from δ_{C} 36.7-38.0 ppm

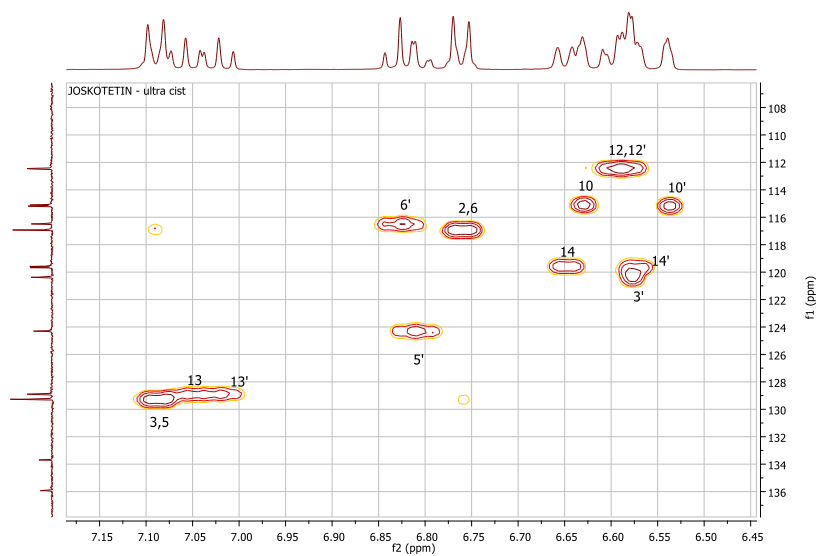


Figure S4. Part of the HSQC spectrum of **1** (perrottetin E) from δ_{H} 6.50-7.20 ppm and δ_{C} 112-130 ppm

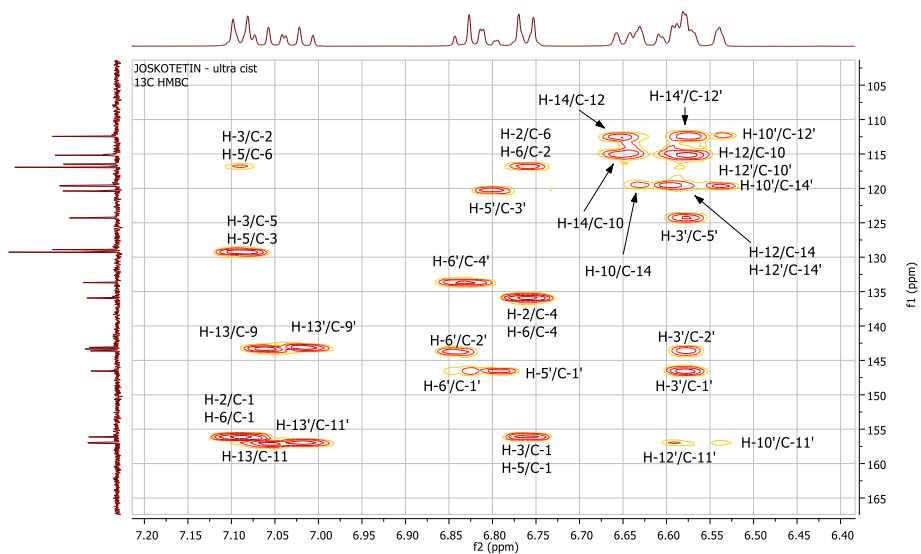


Figure S5. Part of the HMBC spectrum of **1** (perrottetin E) from δ_{H} 6.50–7.2 ppm and δ_{C} 112–160 ppm

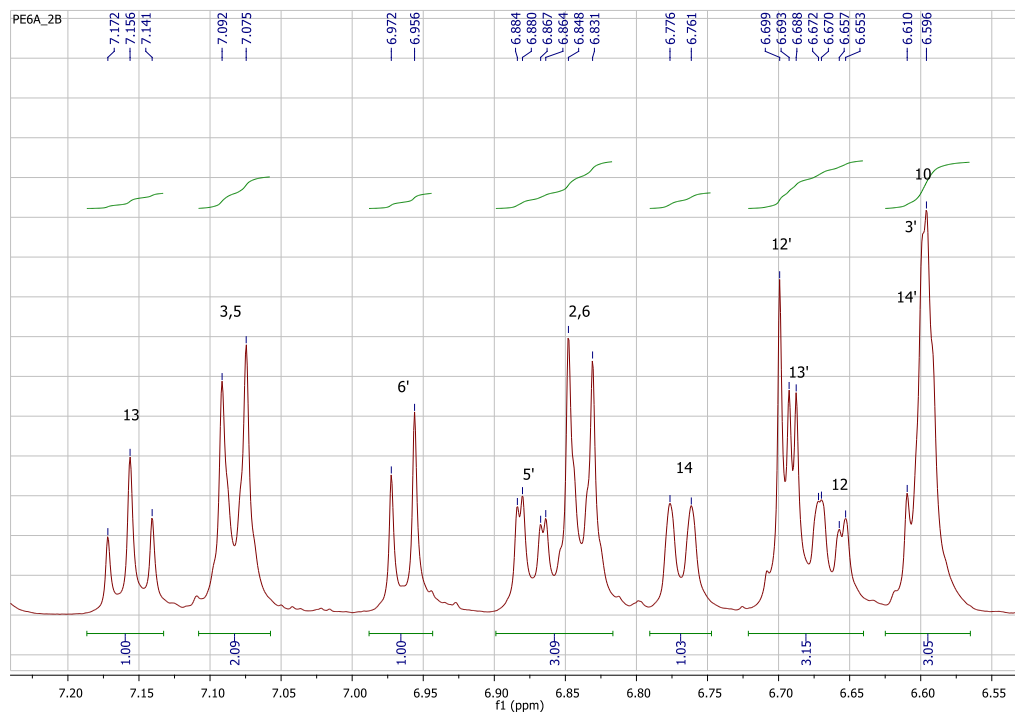


Figure S6. Part of the ^1H NMR spectrum of **2** (10'-hydroxyperrottetin E) δ_{H} 6.60–7.20 ppm

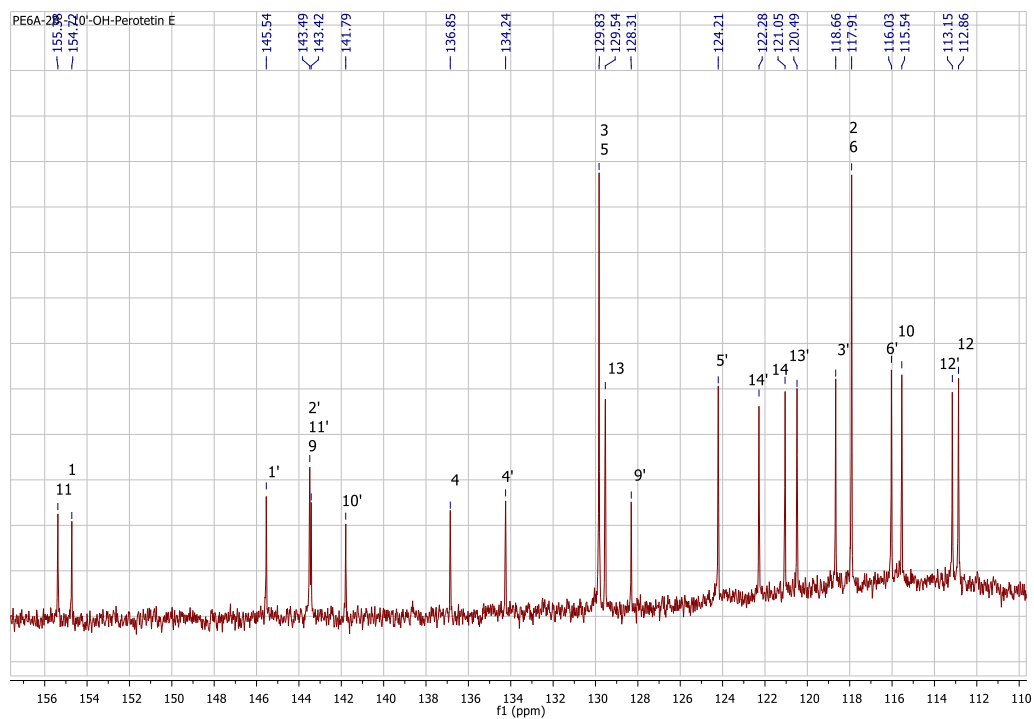


Figure S7. Part of the ^{13}C NMR spectrum of **2** (10'-hydroxyperrottetin E) from δ_{C} 112-156 ppm

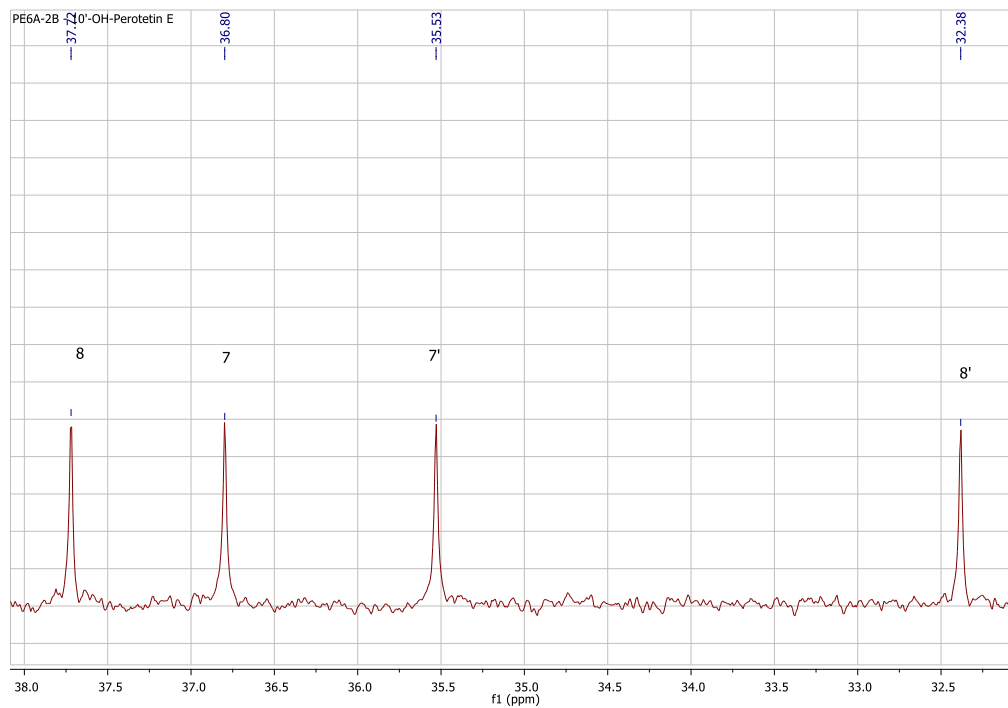


Figure S8. Part of the ^{13}C NMR spectrum of **2** (10'-hydroxyperrottetin E) from δ_{C} 32-38 ppm

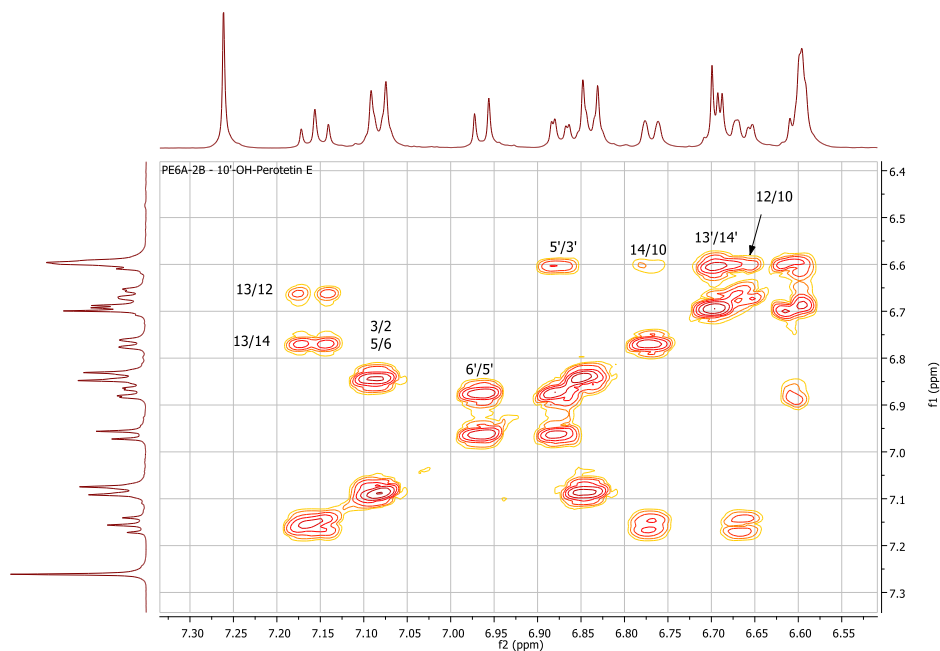


Figure S9. Part of the COSY spectrum of **2** (10'-hydroxyperrottetin E) from δ_{H} 6.50-7.30 ppm

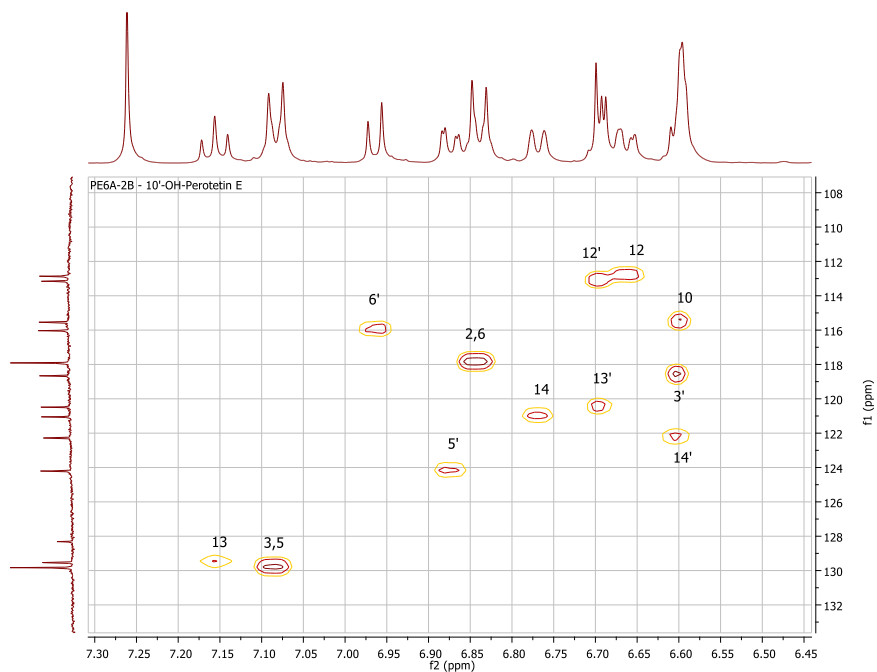


Figure S10. Part of the HSQC spectrum of **2** (10'-hydroxyperrottetin E) from δ_{H} 6.55-7.20 ppm and δ_{C} 112-131 ppm

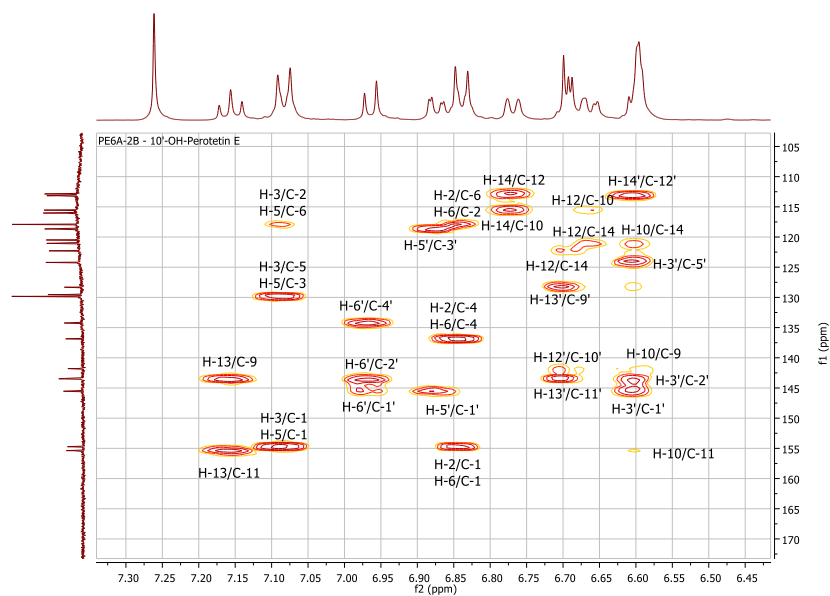


Figure S11. Part of the HMBC spectrum of **2** (10'-hydroxyperrottetin E) from δ_H 6.55-7.20 ppm and δ_C 112-156 ppm

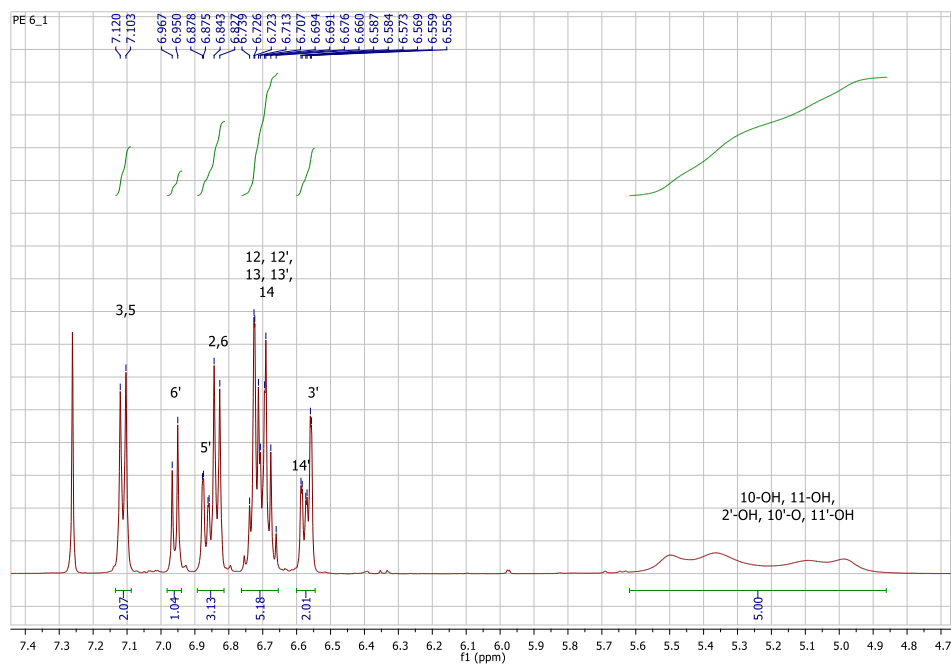


Figure S12. Part of the 1H NMR spectrum of **3** (10,10'-dihydroxyperrottetin E) from δ_H 4.80-7.20 ppm

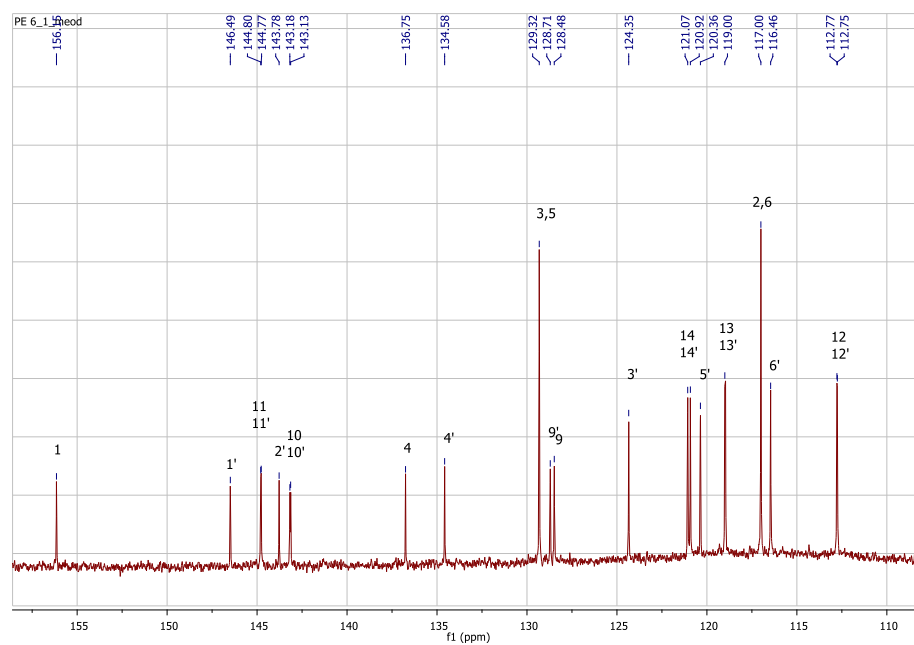


Figure S13. Part of the ^{13}C NMR spectrum of **3** (10,10'-dihydroxyperrottetin E) from δ_{C} 112-157 ppm

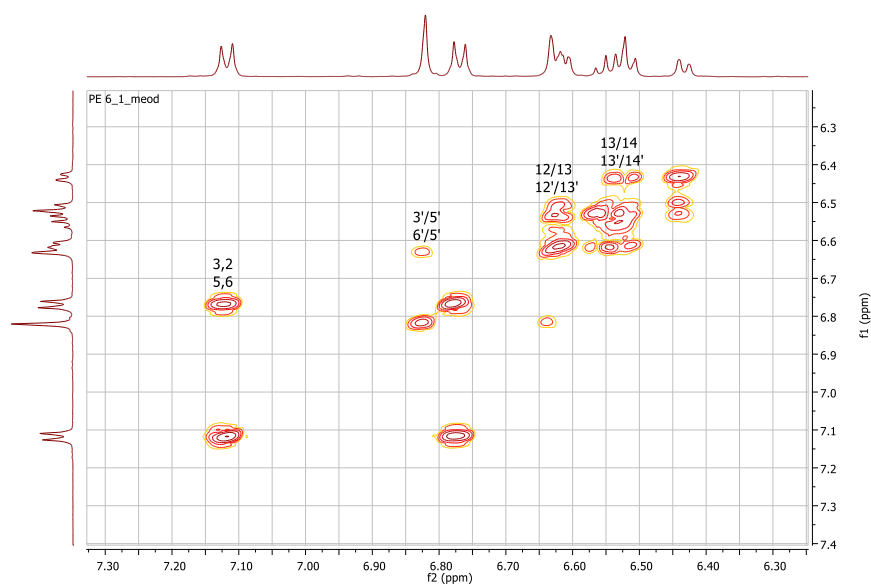


Figure S14. Part of the COSY spectrum of **3** (10,10'-dihydroxyperrottetin E) from δ_{H} 6.50-7.30 ppm

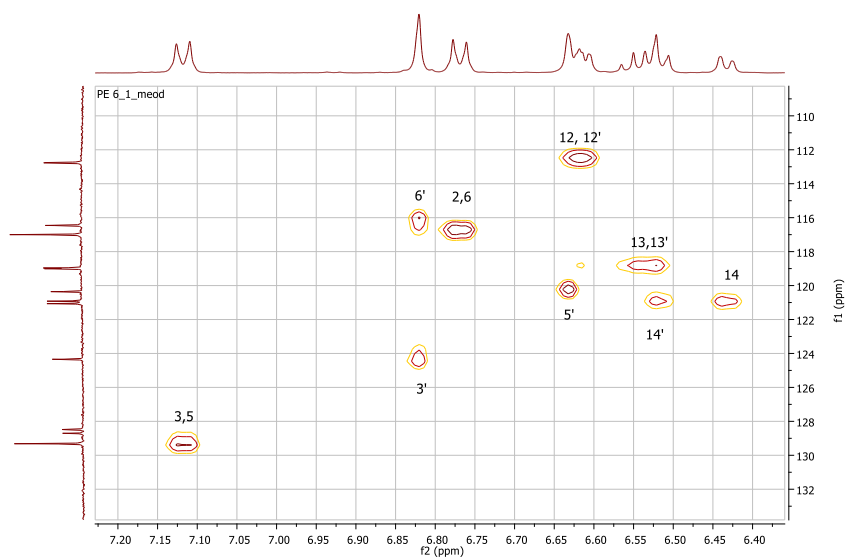


Figure S15. Part of the HSQC spectrum of **3** (10,10'-dihydroxyperrottetin E) from δ_H 6.40-7.15 ppm and δ_C 112-130 ppm

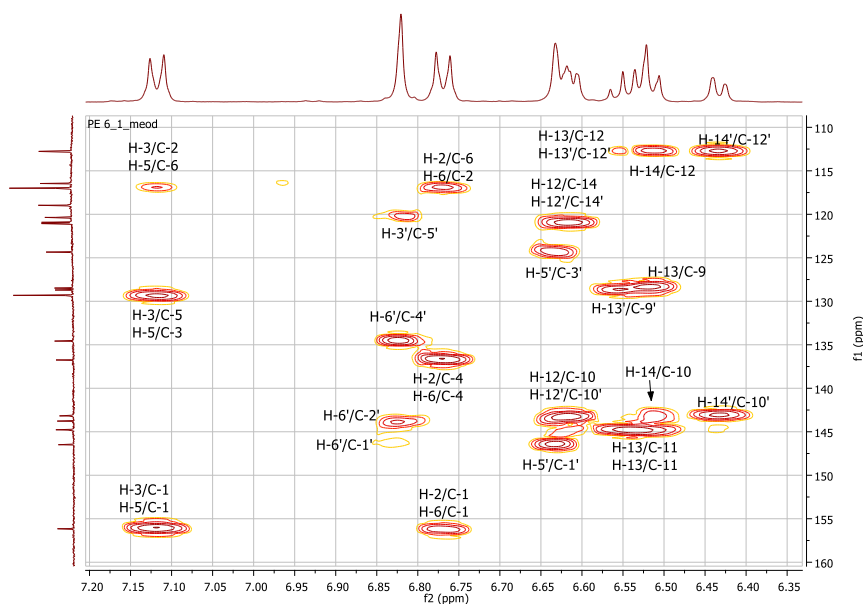


Figure S16. Part of the HMBC spectrum of **3** (10,10'-dihydroxyperrottetin E) from δ_H 6.40-7.15 ppm and δ_C 112-156 ppm