

Supplementary Material

NMR chemical shifts of triterpenes

Lantanilic acid. t_R = 8.5 min (70% acetonitrile, 30% H₂O 0.1% TFA). NMR (700 MHz, CDCl₃). δ 5.57 (1H, hept, J = 1.2 Hz), δ 5.39 (1H, t, J = 3.6 Hz), δ 5.03 (1H, t, J = 3.2 Hz), δ 4.25 (1H, dd, J = 9.1, 3.2 Hz), δ 3.91 (1H, dd, J = 9.1, 1.5 Hz), δ 3.04 (1H, dd, J = 13.8, 4.0 Hz), δ 2.16 (1H, m), δ 2.15 (1H, m), δ 2.14 (3H, d, J = 1.1 Hz), δ 2.02 (1H, m), δ 1.87 (2H, td, J = 13.4, 3.5 Hz), δ 1.85 (3H, d, J = 1.1 Hz), δ 1.79 (1H, m), δ 1.75 (1H, m), δ 1.74 (1H, m), δ 1.69 (1H, m), δ 1.52 (2H, m), δ 1.36 (2H, m), δ 1.29 (1H, m), δ 1.23 (1H, m), δ 1.21 (1H, m), δ 1.20 (1H, m), δ 1.16 (3H, s), δ 1.03 (3H, s), δ 1.01 (3H, s), δ 0.96 (3H, s), δ 0.88 (3H, s), δ 0.77 (3H, s). δ 177.27 (COOH, C-28), δ 165.50 (COOR, C-1'), δ 157.50 (C=C, C-3'), δ 143.06 (C=C, C-13), δ 122.82 (C=C, C-12), δ 116.08 (C=C, C-2'), δ 98.94 (HO-C-OR, C-3), δ 75.35 (C-OR, C-22), δ 68.33 (CH₂, C-25), δ 50.94 (quaternary C, C-17), δ 50.46 (CH, C-5), δ 45.91 (CH₂, C-19), δ 42.22 (quaternary C, C-14), δ 42.12 (CH, C-9), δ 40.41 (quaternary C, C-4), δ 39.40 (CH, C-18), δ 38.88 (quaternary C, C-8), δ 37.93 (CH₂, C-21), δ 35.24 (quaternary C, C-10), δ 34.85 (CH₂, C-1), δ 33.88 (CH₃, C-29), δ 31.21 (CH₂, C-7), δ 30.51 (quaternary C, C-20), δ 29.37 (CH₂, C-2), δ 27.93 (CH₂, C-15), δ 27.58 (CH₃, C-4'), δ 27.37 (CH₃, C-23), δ 26.38 (CH₃, C-30), δ 25.46 (CH₃, C-27), δ 24.25 (CH₂, C-16), δ 23.90 (CH₂, C-11), δ 20.38 (CH₃, C-5'), δ 19.86 (CH₂, C-6), δ 18.40 (CH₃, C-24), δ 17.46 (CH₃, C-26). The ¹H, ¹³C, COSY, HSQC, and HMBC spectra of lantanilic acid can be found in Delgado-Altamirano *et al.*, 2019 [1].

Camaric acid. t_R = 9 min (70% acetonitrile, 30% H₂O 0.1% TFA). NMR (700 MHz, CDCl₃). δ 6.01 (1H, qq, J = 7.3, 1.5 Hz), δ 5.41 (1H, br t, J = 3.4 Hz), δ 5.09 (1H, t, J = 3.2 Hz), δ 4.25 (1H, dd, J = 8.6, 2.7 Hz), δ 3.90 (1H, dd, J = 8.6, 1.5 Hz), δ 3.06 (1H, dd, J = 14.0, 4.1 Hz), δ 2.15 (2H, m), δ 2.01 (1H, s), δ 1.97 (3H, dq, J = 7.3, 1.5), δ 1.89 (2H, td, J = 13.5, 3.4 Hz), δ 1.81 (3H, quint, J = 1.5 Hz), δ 1.81 (1H, m), δ 1.76 (1H, m), δ 1.74 (1H, m), δ 1.71 (1H, m), δ 1.70 (1H, m), δ 1.52 (3H, m), δ 1.37 (2H, m), δ 1.29 (1H, m), δ 1.21 (1H, m), δ 1.20 (1H, m), δ 1.16 (3H, s), δ 1.03 (3H, s), δ 1.01 (3H, s), δ 0.97 (3H, s), δ 0.90 (3H, s), δ 0.77 (3H, s). δ 177.08 (COOH, C-28), δ 166.60 (COOR, C-1'), δ 143.03 (C=C, C-13), δ 157.50 (C=C, C-3'), δ 127.85 (C=C, C-2'), δ 122.95 (C=C, C-12), δ 98.78 (HO-C-OR, C-3), δ 76.05 (C-OR, C-22), δ 67.89 (CH₂, C-25), δ 50.91 (quaternary C, C-17), δ 50.49 (CH, C-5), δ 45.89 (CH₂, C-19), δ 42.22 (quaternary C, C-14), δ 42.12 (CH, C-9), δ 40.41 (quaternary C, C-4), δ 39.42 (CH, C-18), δ 38.47 (quaternary C, C-8), δ 38.00 (CH₂, C-21), δ 35.27 (quaternary C, C-10), δ 34.86 (CH₂, C-1), δ 33.84 (CH₃, C-29), δ 31.20 (CH₂, C-7), δ 30.21 (quaternary C, C-20), δ 29.52 (CH₂, C-2), δ 27.92 (CH₂, C-15), δ 27.39 (CH₃, C-23), δ 26.26 (CH₃, C-30), δ 25.47 (CH₃, C-27), δ 24.32 (CH₂, C-16), δ 23.90 (CH₂, C-11), δ 20.65 (CH₃, C-5'), δ 19.85 (CH₂, C-6), δ 18.39 (CH₃, C-24), δ 17.38 (CH₃, C-26), δ 15.80 (CH₃, C-4'). The ¹H, ¹³C, COSY, HSQC, and HMBC spectra of camaric acid can be found in Delgado-Altamirano *et al.*, 2019 [1].

Lantadene B. t_R = 15.75 min (70% acetonitrile, 30% H₂O 0.1% TFA). NMR (700 MHz, CDCl₃). δ 5.56 (3H, t, J = 3.4 Hz), δ 5.38 (1H, t, J = 3.4 Hz), δ 5.04 (1H, t, J = 3.1 Hz), δ 3.03 (1H, dd, J = 13.70, 4.2 Hz), δ 2.55 (1H, ddd, J = 15.9, 11.2, 7.2 Hz), δ 2.37 (1H, ddd, J = 15.8, 6.7, 3.6 Hz), δ 2.13 (3H, d, J = 1.1 Hz), δ 1.92 (2H, m), δ 1.90 (1H, m), δ 1.87 (2H, m), δ 1.84 (3H, d, J = 1.1 Hz), δ 1.74 (1H, m), δ 1.71 (1H, m), δ 1.66 (1H, dd, J = 11.2, 6.4 Hz), δ 1.47 (1H, m), δ 1.41 (1H, m), δ 1.31 (3H, m), δ 1.17 (3H, s), δ 1.14 (1H, m), δ 1.09 (3H, s), δ 1.06 (3H, s), δ 1.04 (3H, s), δ 1.00 (3H, s), δ 0.88 (3H, s), δ 0.84 (3H, s). δ 217.81 (C=O, C-3), δ 178.72 (COOH, C-28), δ 165.41 (COOR, C-1'), δ 157.20 (C=C, C-3'), δ 143.22 (C=C, C-13), δ 122.51 (C=C, C-12), δ 116.12 (C=C, C-2'), δ 75.37 (C-OR, C-22), δ 55.47 (CH, C-5), δ 50.73 (quaternary C, C-17), δ 47.59 (quaternary C, C-4), δ 47.03 (CH, C-9), δ 46.13 (CH₂, C-19), δ 42.22 (quaternary C, C-14), δ 39.40 (quaternary C, C-8), δ 39.32 (CH₂, C-1), δ 38.75 (CH, C-18), δ 37.80

(CH₂, C-21), δ 36.90 (quaternary C, C-10), δ 34.24 (CH₂, C-2), δ 33.88 (CH₃, C-29), δ 32.43 (CH₂, C-7), δ 30.21 (quaternary C, C-20), δ 27.76 (CH₂, C-15), δ 27.57 (CH₃, C-5'), δ 26.60 (CH₃, C-23), δ 26.43 (CH₃, C-30), δ 25.90 (CH₃, C-27), δ 24.28 (CH₂, C-16), δ 23.71 (CH₂, C-11), δ 21.64 (CH₃, C-24), δ 20.38 (CH₃, C-4'), δ 19.69 (CH₂, C-6), δ 17.00 (CH₃, C-26), δ 15.30 (CH₂, C-25).

Figure S1. ¹H NMR spectrum of Lantadene B in CDCl₃.

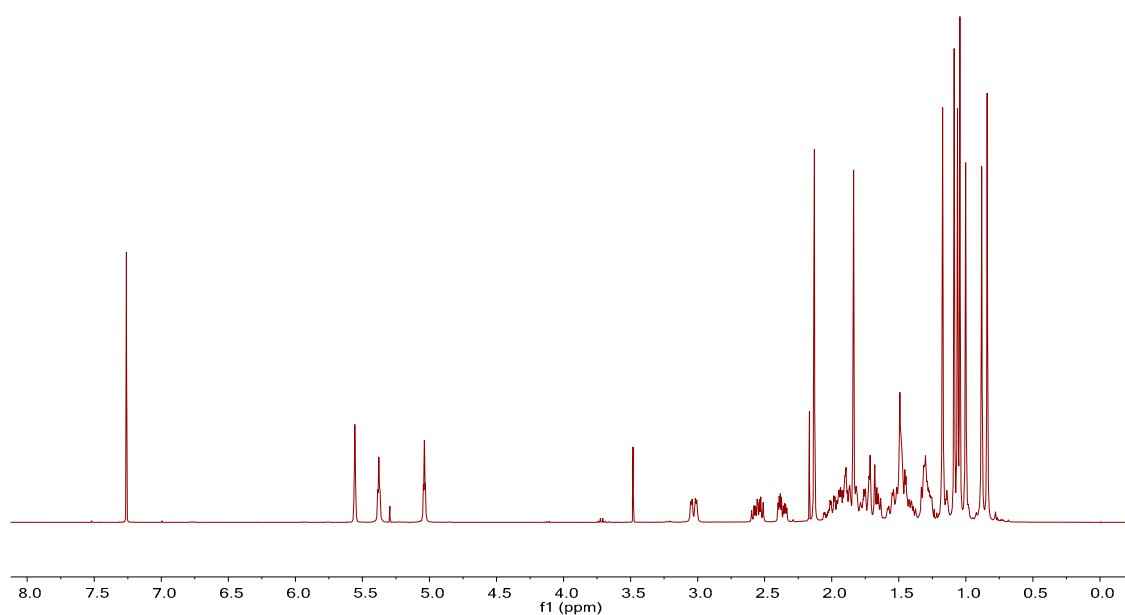


Figure S2. ¹³C NMR spectrum of Lantadene B in CDCl₃.

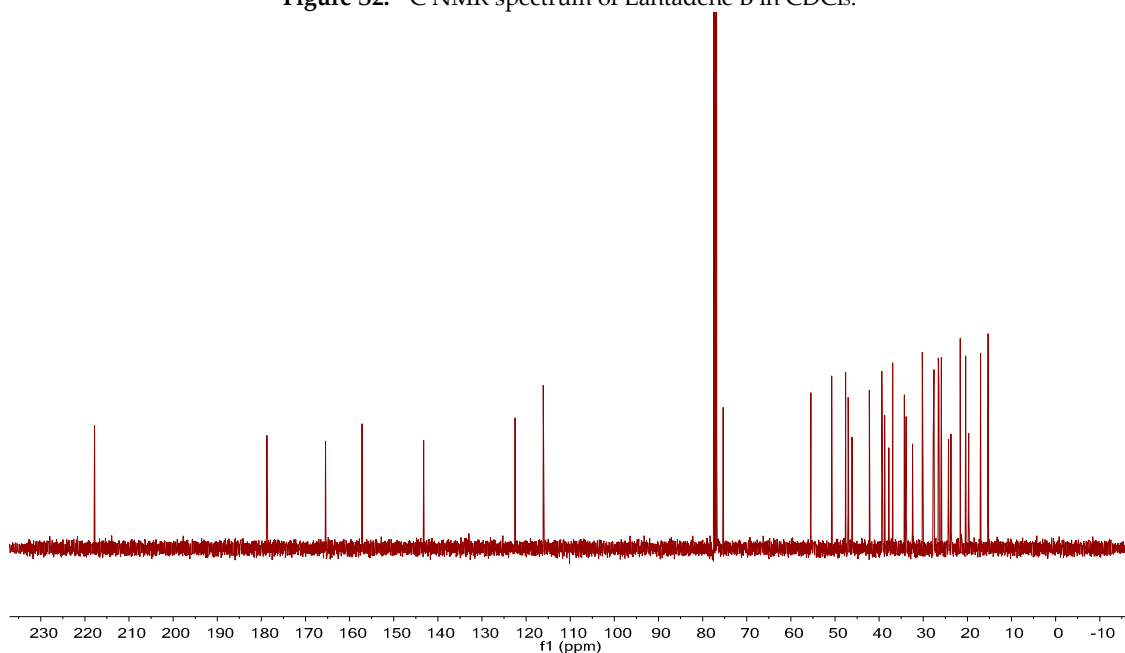


Figure S3. ^1H - ^1H COSY spectrum of Lantadene B in CDCl_3 .

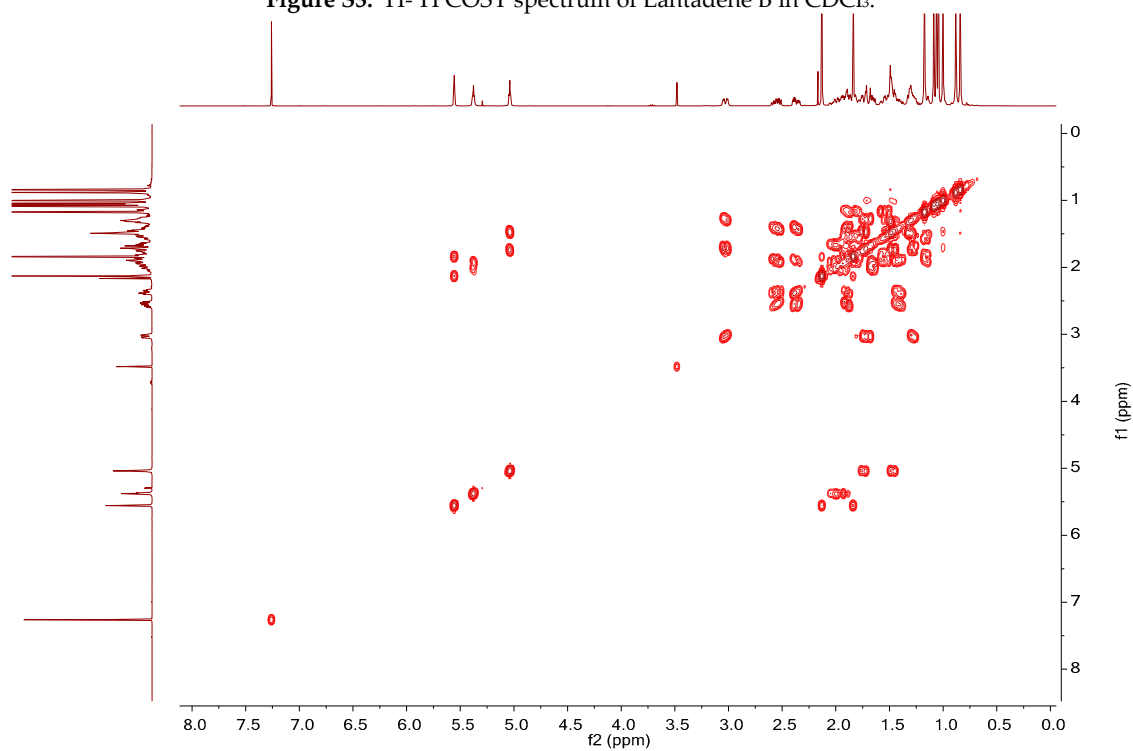


Figure S4. ^1H - ^{13}C HSQC spectrum of Lantadene B in CDCl_3 .

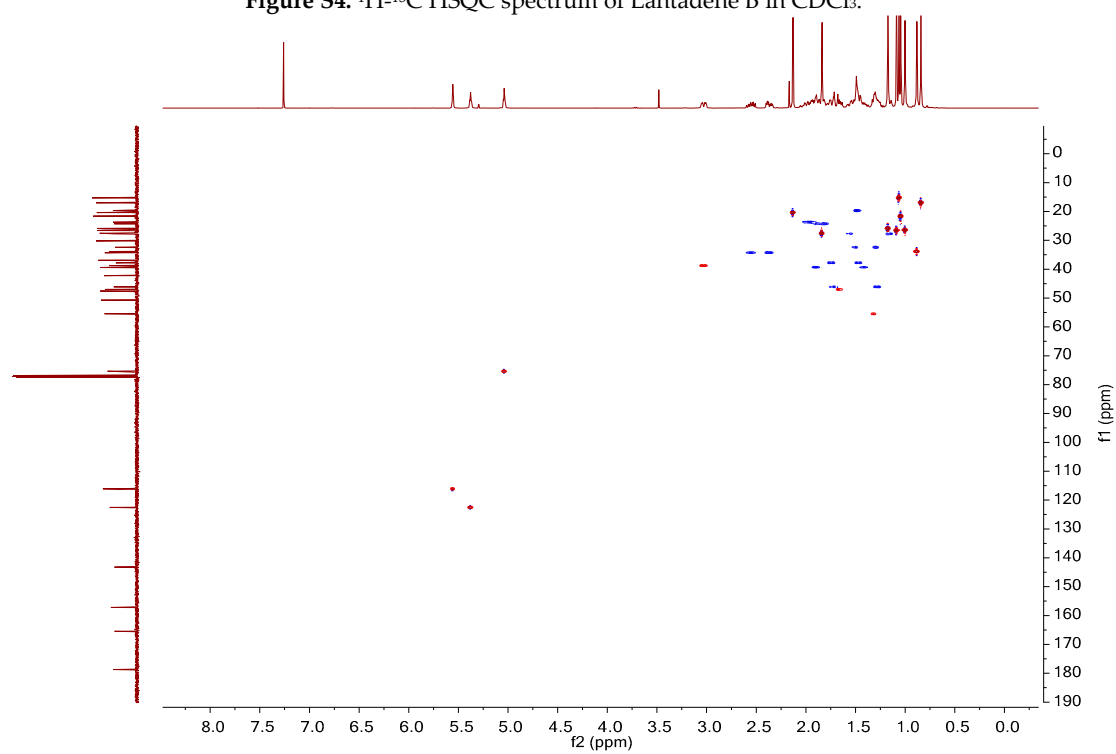
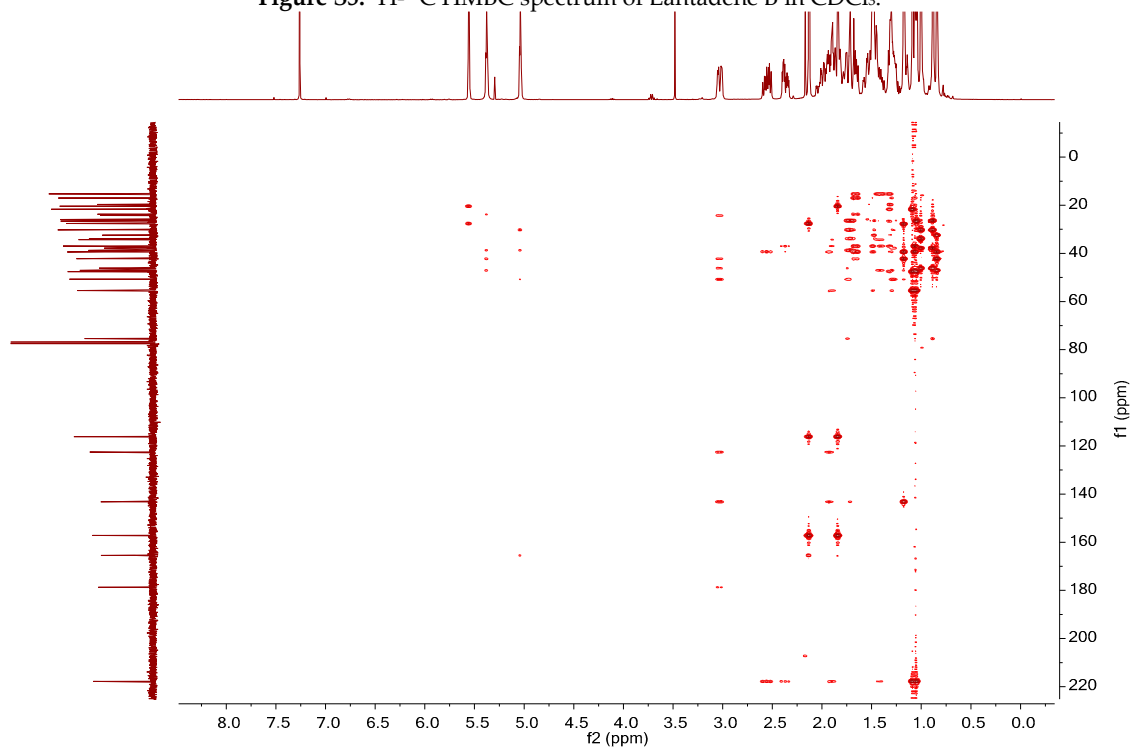


Figure S5. ^1H - ^{13}C HMBC spectrum of Lantadene B in CDCl_3 .



References

1. Delgado-Altamirano, R.; Rojas, A.; Esturau-Escofet, N. ^1H and ^{13}C NMR reassignment of some chemical shifts of lantanilic acid and camaric acid. *Magn. Reson. Chem.* **2019**, in Press (DOI: <http://10.1002/mrc.4839>).