

Supporting Information

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Triterpenoids from *Garcinia rigida*

Friedelin (1): White needle crystals, IR ν_{max} 2928, 1713 (C=O) cm^{-1} . $^1\text{H-NMR}$ (CDCl_3 , 500 MHz), δ : 0.70 (3H, s), 0.85 (3H, s), 0.86 (3H, s), 0.93 (3H, s), 0.97 (3H, s), 0.98 (3H, s), 1.03 (3H, s), 1.16 (3H, s). $^{13}\text{C-NMR}$ (CDCl_3 , 125 MHz) δ : 22.3 (C-1), 41.5 (C-2), 213.1 (C-3), 58.2 (C-4), 42.1 (C-5), 41.3 (C-6), 18.3 (C-7), 53.1 (C-8), 37.4 (C-9), 59.5 (C-10), 35.7 (C-11), 30.5 (C-12), 39.7 (C-13), 38.3 (C-14), 32.4 (C-15), 36.0 (C-16), 30.0 (C-17), 42.8 (C-18), 35.4 (C-19), 28.2 (C-20), 32.8 (C-21), 39.3 (C-22), 6.8 (C-23), 14.7 (C-24), 17.9 (C-25), 20.3 (C-26), 18.6 (C-27), 32.1 (C-28), 35.0 (C-29), 31.8 (C-30), EIMS: $m/z = 426$ $[\text{M}]^+$ for formula $\text{C}_{30}\text{H}_{50}\text{O}$. [8]

Lanosta-8,25-en-3 β -ol (2): White needle crystals, IR ν_{max} 3258 (-OH), 2914 cm^{-1} . $^1\text{H-NMR}$ (CDCl_3 , 500 MHz) δ : 0.67 (3H, s, H-18), 0.86 (3H, s, H-19), 0.84 (3H, s, H-21), 4.86 (1H, s, H-25), 4.62 (1H, s, H-26), 1.24 (3H, s, H-27), 0.87 (3H, s, H-28), 0.98 (3H, s, H-29), 0.77 (3H, s, H-30). $^{13}\text{C-NMR}$ (CDCl_3 , 125 MHz) δ : 36.9 (C-1), 26.5 (C-2), 78.9 (C-3), 31.1 (C-4), 54.7 (C-5), 22.9 (C-6), 28.0 (C-7), 123.6 (C-8), 134.3 (C-9), 31.5 (C-10), 24.1 (C-11), 30.9 (C-12), 39.6 (C-13), 39.1 (C-14), 34.6 (C-15), 29.5 (C-16), 56.9 (C-17), 15.4 (C-18), 24.1 (C-19), 42.9 (C-20), 18.8 (C-21), 36.6 (C-22), 29.7 (C-23), 38.2 (C-24), 148.3 (C-25), 106.6 (C-26), 23.6 (C-27), 33.1 (C-28), 14.5 (C-29), 28.3 (C-30). EIMS: $m/z = 426$ $[\text{M}]^+$ for $\text{C}_{30}\text{H}_{50}\text{O}$. [8,9]

Stigmasterol (3): White needle crystals, IR ν_{max} 3423 (-OH), 2935 cm^{-1} . $^1\text{H-NMR}$ (CDCl_3 , 400 MHz) δ : 0.68 (3H, s), 0.80 (3H, s), 0.83 (3H, s), 0.84 (3H, s), 0.96 (3H, s), 1.01 (3H, s), 3.50 (1H, m), 5.02 (1H, dd), 5.12 (1H, dd), 5.34 ppm (1H, d). $^{13}\text{C-NMR}$ (CDCl_3 , 100 MHz) δ : 37.3 (C-1), 31.7 (C-2), 71.8 (C-3), 42.3 (C-4), 140.8 (C-5), 121.7 (C-6), 33.0 (C-7), 31.9 (C-8), 50.2 (C-9), 36.5 (C-10), 25.4 (C-11), 39.7 (C-12), 42.2 (C-13), 56.9 (C-14), 24.4 (C-15), 28.9 (C-16), 56.0 (C-17), 12.0 (C-18), 19.4 (C-19), 40.4 (C-20), 21.2 (C-21), 138.3 (C-22), 129.3 (C-23), 51.2 (C-24), 31.8 (C-25), 18.9 (C-26), 21.1 (C-27), 12.2 (C-29). EIMS: $m/z = 412$ $[\text{M}]^+$ for formula $\text{C}_{29}\text{H}_{48}\text{O}$. [9]

Lupeol (4): White needle crystals, IR, ν_{max} 3309 (-OH), 2933 cm^{-1} . $^1\text{H-NMR}$ (CDCl_3 , 400 MHz) δ : 0.75 (3H, s), 0.78 (3H, s), 0.86 (3H, s), 0.88 (3H, s), 0.90 (3H, s), 0.98 (3H, s), 1.04 (3H, s), 3.12 (1H, m), 4.64 (1H, d), 4.51 ppm (1H, d). $^{13}\text{C-NMR}$ (CDCl_3 , 100 MHz) δ : 38.6 (C-1), 27.2 (C-2), 78.9 (C-3), 39.9 (C-4), 55.4 (C-5), 18.7 (C-6), 35.0 (C-7), 40.7 (C-8), 50.2 (C-9), 37.5 (C-10), 20.8 (C-11), 25.8 (C-12), 37.7 (C-13), 42.7 (C-14), 27.4 (C-15), 37.6 (C-16), 42.9 (C-17), 48.2 (C-18), 47.9 (C-19), 150.9 (C-20), 31.0 (C-21), 41.2 (C-22), 27.9 (C-23), 15.4 (C-24), 16.1 (C-25), 15.9 (C-26), 14.5 (C-27), 18.7 (C-28), 109.2 (C-29), 21.2 (C-30). EIMS: $m/z = 426$ $[\text{M}]^+$ for formula $\text{C}_{30}\text{H}_{50}\text{O}$. [8,9]

3 β -hydroxy-20(29)-en-lupan-30-al (5): White needle crystals, IR, $\nu_{max} = 3275$ (-OH), 2753 and 2700 cm^{-1} (aldehyde C-H) and 1682 cm^{-1} (aldehyde C=O). $^1\text{H-NMR}$ (CDCl_3 , 500 MHz) δ : 0.76 (1H, s), 0.81 (1H, s), 0.84 (1H, s), 0.94 (1H, s), 0.96 (1H, s), 1.02 (1H, s), 3.20 (1H, m, H-3), 5.91 (H-19), 6.29 (H-29), 9.51 (H-30). $^{13}\text{C-NMR}$ (CDCl_3 , 125 MHz) δ : 38.7 (C-1), 27.4 (C-2), 78.9 (C-3), 38.9 (C-4), 55.3 (C-5), 18.3 (C-6), 34.3 (C-7), 40.8 (C-8), 50.3 (C-9), 37.1 (C-10), 20.9 (C-11), 27.3 (C-12), 37.7 (C-13), 42.7 (C-14), 27.6 (C-15), 34.4 (C-16), 43.3 (C-17), 55.3 (C-18), 50.3 (C-19), 157.1 (C-20),

29.7 (C-21), 39.9 (C-22), 15.4 (C-24), 16.0 (C-25), 15.9 (C-26), 14.4 (C-27), 17.8 (C-28), 133.2 (C-29), 195.1 (C-30). EIMS: $m/z = 440$ $[M]^+$ for formula $C_{30}H_{48}O_2$. [8,9]

3 β -hydroxy-20(29)-en-lupan-30-ol (6): White needle crystals, IR, $\nu_{\max} = 3318$ (-OH) dan 2936 cm^{-1} . 1H -NMR ($CDCl_3$, 400 MHz) δ : 0.81 (3H, s), 0.87 (3H, s), 0.96 (3H, s), 1.02 (3H, s), 1.04 (3H, s), 1.23 (3H, s), 3.46 (1H, m), 5.50 and 5.18 ppm. ^{13}C -NMR ($CDCl_3$, 100 MHz) δ : 40.2 (C-1), 27.8 (C-2), 78.2 (C-3), 39.6 (C-4), 55.9 (C-5), 18.8 (C-6), 35.8 (C-7), 41.2 (C-8), 50.8 (C-9), 37.5 (C-10), 21.2 (C-11), 26.9 (C-12), 38.4 (C-13), 43.0 (C-14), 28.3 (C-15), 34.7 (C-16), 43.3 (C-17), 49.0 (C-18), 43.27 (C-19), 156.6 (C-20), 32.1 (C-21), 39.3 (C-22), 28.6 (C-23), 16.2 (C-24), 16.5 (C-25), 16.4 (C-26), 14.8 (C-27), 17.9 (C-28), 106.3 (C-29), 64.3 (C-30). EIMS: $m/z = 442$ $[M]^+$ for formula $C_{30}H_{50}O_2$. [8,9]