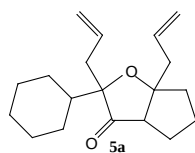
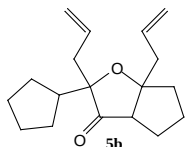


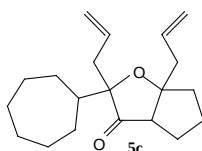
Supporting Information:
spectroscopic data for compounds 5a-5f, 6a, 7a and 8a-8f.



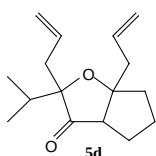
$R_f = 0.46$ (5:95 EtOAc/PE). IR $\nu_{\max}$ 3079, 1746, 1640 cm^{-1} . ^1H NMR (CDCl_3 , 200 MHz) δ 6.00-5.65 (2H, m), 5.15-5.00 (4H, m), 2.71-2.55 (2H, m), 2.30-2.50 (3H, m), 2.16-1.47 (12H, m), 1.41-0.95 (5H, m) ppm. ^{13}C NMR (CDCl_3 , 50 MHz) δ 220.0 (C), 134.2 (CH), 132.7 (CH), 118.4 (CH_2), 118.3 (CH_2), 90.0 (C), 88.6 (C), 55.4 (CH), 46.3 (CH_2), 42.4 (CH), 39.9 (CH_2), 39.4 (CH_2), 30.7 (CH_2), 27.3 (CH_2), 26.7 (3 CH_2), 26.5 (CH_2), 25.6 (CH_2) ppm. MS (CI, NH_3), m/z 289 (M+1), 306 (M+18).



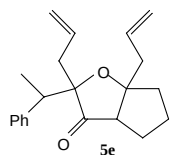
^1H NMR (CDCl_3) δ 6.00-5.58 (2H, m), 5.15-5.02 (4H, m), 2.65-2.60 (2H, m), 2.46-2.35 (3H, m), 2.20-1.20 (15H, m) ppm. ^{13}C NMR (CDCl_3) δ 219.6 (C), 134.1 (CH), 132.8 (CH), 118.3 (2 CH_2), 89.8 (C), 87.8 (C), 55.3 (CH), 46.3 (CH_2), 44.7 (CH), 41.6 (CH_2), 39.9 (CH_2), 30.5 (CH_2), 26.8 (2 CH_2), 25.5 (CH_2), 25.1 (CH_2), 24.9 (CH_2) ppm.



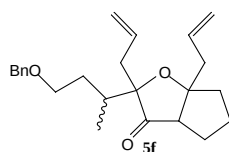
$R_f = 0.31$ (3:97 EtOAc/PE). ^1H NMR (CDCl_3) δ 5.98-5.64 (2H, m), 5.15-5.00 (4H, m), 2.68-2.35 (5H, m), 2.11-1.10 (19H, m) ppm. ^{13}C NMR (CDCl_3) δ 220.2 (C), 134.2 (CH), 133.0 (CH), 118.4 (CH_2), 118.2 (CH_2), 89.8 (C), 89.5 (C), 55.3 (CH), 46.2 (CH_2), 44.0 (CH), 39.8 (CH_2), 39.2 (CH_2), 30.7 (CH_2), 29.3 (CH_2), 28.1 (CH_2), 28.0 (CH_2), 27.9 (CH_2), 27.5 (CH_2), 27.3 (CH_2), 25.7 (CH_2) ppm.



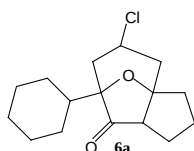
$R_f = 0.41$ (1:6 EtOAc/PE). IR $\nu_{\max}$ 3078, 1747, 1640 cm^{-1} . ^1H NMR (CDCl_3) δ 6.00-5.65 (2H, m), 5.16-5.07 (4H, m), 2.70-2.55 (2H, m), 2.45-2.35 (3H, m), 2.10-1.50 (7H, m), 0.96 (3H, d, $J = 6.9$ Hz), 0.92 (3H, d, $J_3 = 6.8$) ppm. ^{13}C NMR (CDCl_3) δ 214.0 (C), 134.2 (CH), 132.8 (CH), 118.4 (CH_2), 118.3 (CH_2), 89.9 (C), 88.7 (C), 55.5 (CH), 46.3 (CH_2), 39.9 (CH_2), 39.4 (CH_2), 32.5 (CH), 30.7 (CH_2), 25.5 (CH_2), 17.5 (CH_3), 16.7 (CH_3) ppm.



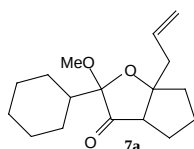
^1H NMR (CDCl_3) δ 7.33-7.22 (5H, m), 6.00-5.60 (2H, m), 5.17-4.85 (4H, m), 2.75-2.55 (2H, m), 2.50-2.15 (3H, m), 2.00-1.38 (7H, m), 1.24 (3H, d, $J = 7.1$ Hz) ppm. ^{13}C NMR (CDCl_3) δ 219.2 (C), 142.9 (C), 127.8 (2 CH), 126.4 (3 CH), 134.1 (CH), 131.2 (CH), 118.7 (CH_2), 118.1 (CH_2), 90.1 (C), 88.9 (C), 55.0 (CH), 46.3 (CH_2), 43.8 (CH), 41.3 (CH_2), 39.7 (CH_2), 30.4 (CH_2), 24.9 (CH_2), 17.5 (CH_3) ppm.



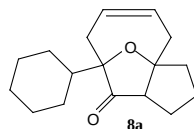
Major isomer $R_f = 0.27$ (5:95 EtOAc/PE). ^1H NMR (CDCl_3) δ 7.42-7.23 (5H, m), 6.03-5.66 (2H, m), 5.21-5.05 (4H, m), 4.61-4.40 (2H, m), 3.63-3.36 (2H, m), 2.75-2.50 (2H, m), 2.50-2.27 (3H, m), 2.24-1.23 (9H, m), 0.99-0.91 (3H, m) ppm. ^{13}C NMR (CDCl_3) δ 219.6 (C), 139.1 (C), 128.4 et 127.7 (5 CH), 134.3 (CH), 133.0 (CH), 118.5 (CH_2), 118.1 (CH_2), 90.1 (C), 88.8 (C), 72.9 (CH_2), 69.0 (CH_2), 55.8 (CH), 46.3 (CH_2), 35.1 (CH), 40.0 (CH_2), 39.4 (CH_2), 29.8 (CH_2), 25.7 (CH_2), 14.3 (CH_3) ppm.



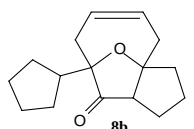
$R_f = 0.38$ (5:95 EtOAc/PE). IR $\nu_{\max}$ 2854, 1752 cm^{-1} . ^1H NMR (CDCl_3) δ 4.10-3.97 (1H, m), 2.46-2.41 (1H, m), 2.20-1.00 (7H, m) ppm. ^{13}C NMR (CDCl_3) δ 218.9 (C), 89.8 (C), 89.0 (C), 55.6 (CH), 53.0 (CH), 42.4 (CH_2), 41.1 (CH_2), 41.1 (CH), 37.4 (CH_2), 27.5 (CH_2), 26.9 (CH_2), 26.7 (CH_2), 26.4 (2 CH_2), 26.2 (CH_2), 24.6 (CH_2) ppm.



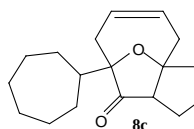
$R_f = 0.67$ (20:80 EtOAc/PE). IR $\nu_{\max}$ 3078, 2854, 1751, 1640 cm^{-1} . ^1H NMR (CDCl_3) δ 5.88-5.67 (1H, m), 5.11-4.98 (2H, m), 3.38 (3H, s), 2.72 (1H, dd, $J = 10$ and 3 Hz), 2.54 (2H, d, $J = 7.2$ Hz), 2.28-1.49 (10H, m), 1.46-0.97 (7H, m) ppm. ^{13}C NMR (CDCl_3) δ 218.5 (C), 132.3 (CH), 118.2 (CH_2), 116.2 (C), 90.0 (C), 56.3 (CH), 50.5 (CH_3), 41.1 (CH), 39.0 (CH_2), 36.9 (CH_2), 28.4 (CH_2), 27.2 (CH_2), 26.6 (2 CH_2), 26.4 (3 CH_2), 25.4 (CH_2) ppm.



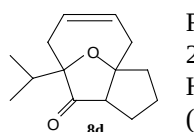
$R_f = 0.36$ (5:95 EtOAc/PE). IR $\nu_{\max}$ 1751 cm^{-1} . ^1H NMR (CDCl_3) δ 5.61-5.48 (m, 2H), 2.90-2.50 (m, 2H), 2.41-2.38 (1H, m), 2.25-2.10 (3H, m), 2.05-1.03 (16H, m) ppm. ^{13}C NMR (CDCl_3) δ 223.6 (C), 127.5 (CH), 126.7 (CH), 90.3 (C), 88.8 (C), 55.2 (CH), 44.1 (CH), 41.4 (CH_2), 40.8 (CH_2), 37.9 (CH_2), 29.2 (CH_2), 27.8 (CH_2), 26.9 (CH_2), 26.8 (CH_2), 26.6 (CH_2), 26.4 (CH_2), 25.5 (CH_2) ppm. MS (CI, NH_3), m/z 261 (M+1), 278 (M+18).



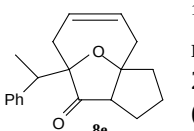
$R_f = 0.35$ (5:95 EtOAc/PE). ^1H NMR (CDCl_3) δ 5.65-5.40 (2H, m), 2.90-2.65 (1H, m), 2.60-1.30 (19H, m) ppm. ^{13}C NMR (CDCl_3) δ 222.5 (C), 127.4 (CH), 126.6 (CH), 90.3 (C), 87.8 (C), 55.0 (CH), 46.0 (CH), 41.5 (CH_2), 40.8 (CH_2), 39.8 (CH_2), 30.1 (CH_2), 27.1 (2 CH_2), 25.5 (CH_2), 25.4 (CH_2), 25.1 (CH_2) ppm.



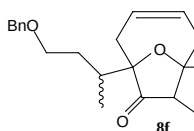
$R_f = 0.21$ (5:95 EtOAc/PE). IR $\nu_{\max}$ 1749, 1658 cm^{-1} . ^1H NMR (CDCl_3) δ 5.69-5.39 (2H, m), 2.90-2.73 (1H, m), 2.73-2.57 (1H, m), 2.47-2.35 (1H, m), 2.32-1.08 (21H, m) ppm. ^{13}C NMR (CDCl_3) δ 223.4 (C), 127.4 (CH), 126.7 (CH), 90.2 (C), 90.1 (C), 55.3 (CH), 45.3 (CH), 41.4 (CH_2), 40.8 (CH_2), 38.3 (CH_2), 30.0 (CH_2), 29.9 (CH_2), 28.5 (CH_2), 28.4 (CH_2), 28.1 (CH_2), 27.5 (CH_2), 27.1 (CH_2), 25.5 (CH_2) ppm.



$R_f = 0.27$ (35:65 EtOAc/PE). IR $\nu_{\max}$ 1749 cm^{-1} . ^1H NMR (CDCl_3) δ 5.60-5.50 (2H, m), 2.87-2.78 (1H, m), 2.65-2.56 (1H, m), 2.44-2.38 (1H, m), 2.31-1.62 (9H, m), 1.00 (3H, d, $J = 6.9$ Hz), 0.88 (3H, d, $J = 6.8$ Hz) ppm. ^{13}C NMR (CDCl_3) δ 223.1 (C), 127.5 (CH), 126.7 (CH), 90.3 (C), 88.7 (C), 55.3 (CH), 41.5 (CH_2), 40.8 (CH_2), 38.3 (CH_2), 34.1 (CH), 30.0 (CH_2), 25.5 (CH_2), 18.0 (CH_3), 17.1 (CH_3) ppm.



^1H NMR (CDCl_3) δ 7.40-7.12 (5H, m), 5.62-5.35 (2H, m), 3.10-2.95 (1H, m), 2.92-2.72 (1H, m), 2.51-2.42 (1H, m), 2.30-1.60 (11H, m), 1.22 (3H, d, $J = 7.1$ Hz) ppm. ^{13}C NMR (CDCl_3) δ 223.1 (C), 143.3 (C), 129.2 (2 CH), 128.2 (2 CH), 127.2 (CH), 126.6 (CH), 126.5 (CH), 90.9 (C), 88.9 (C), 54.8 (CH), 46.0 (CH), 41.5 (CH_2), 40.9 (CH_2), 40.1 (CH_2), 30.3 (CH_2), 25.4 (CH_2), 17.9 (CH_3) ppm.



Mixture of 2 isomers 1:1. $R_f = 0.30$ (10:90 EtOAc/PE). ^1H NMR (CDCl_3) δ 7.35-7.26 (5H, m), 5.65-5.45 (2H, m), 4.55-4.43 (2H, m), 3.45-3.60 (2H, m), 2.86-2.81 (1H, m), 2.7-2.60 (1H, m), 2.47-2.41 (1H, m), 2.35-1.70 (9H, m), 1.70-1.50 (4H, m), 1.01 (3H, d, $J = 6.9$ Hz, one isomer), 0.88 (3H, d, $J = 6.8$ Hz, the other isomer) ppm. MS (CI, NH_3), m/z 341 (M+1), 358 (M+18).