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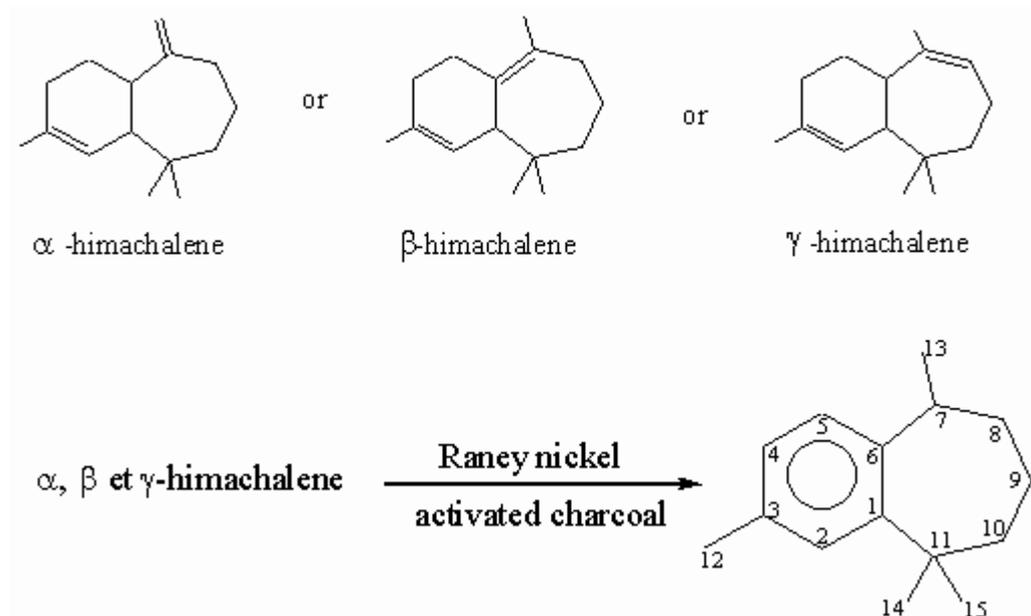
## ar-Himachalene

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The reaction of dehydrogenation on the natural mixture of himachalene is already known [1]. A convenient synthesis of arylhimachalene was investigated. The three isomeric sesquiterpenes  $\alpha$ -,  $\beta$ - and  $\gamma$ -himachalene, constituents of the essential oil of Atlas cedar (*cedrus atlantica*), were dehydrogenated with Raney-nickel/activated charcoal. The reaction gives a good yield and high selectivity. A three-necked flask equipped with a stirring bar and a long condenser, and containing 150 mL of a mixture of  $\alpha$ -,  $\beta$ - and  $\gamma$ -himachalene, 5 g of activated charcoal and 18.5 g of Raney nickel was heated. The temperature was maintained at 250°C for 5 days. After cooling, hexane was added. The mixture was filtered through silica gel column and the hexane evaporated. The product was purified by fractional distillation under reduced pressure ( $T=100^\circ\text{C}$ ,  $P=10^{-1}$  mm Hg), yield: 83%. The purity of arylhimachalene was determined by gas chromatography (95%).

$^1\text{H NMR}$  ( $\text{CDCl}_3$ ): 7.34 (d,  $J^4=1.61\text{Hz}$ ,  $\text{H}_2$ ), 7.27 (d,  $J^3=7.84\text{Hz}$ ,  $\text{H}_5$ ), 7.13 (dd,  $J^4=1.61\text{Hz}$ ,  $J^3=7.84\text{Hz}$ ,  $\text{H}_4$ ), 3.41 (m,  $\text{H}_7$ ), 2.46 (s,  $\text{H}_{12}$ ), 1.94, 1.42 (m, m,  $\text{H}_9$ ), 1.92, 1.78 (m, m,  $\text{H}_{10}$ ), 1.91, 1.42 (m, m,  $\text{H}_8$ ), 1.57 (s,  $\text{H}_{14}$ ), 1.49 (s,  $\text{H}_{13}$ ), 1.49 (s,  $\text{H}_{15}$ ).

$^{13}\text{C NMR}$  ( $\text{CDCl}_3$ ): 148.19 ( $\text{C}_1$ ), 141.72 ( $\text{C}_6$ ), 135.45 ( $\text{C}_3$ ), 128.06 ( $\text{C}_2$ ), 127.05 ( $\text{C}_4$ ), 125.96 ( $\text{C}_5$ ), 41.63 ( $\text{C}_{10}$ ), 40.02 ( $\text{C}_{11}$ ), 37.04 ( $\text{C}_8$ ), 34.98 ( $\text{C}_7$ ), 34.48 ( $\text{C}_{14}$ ), 30.27 ( $\text{C}_{15}$ ), 24.57 ( $\text{C}_9$ ), 21.73 ( $\text{C}_{12}$ ), 21.56 ( $\text{C}_{13}$ ).

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*Sample Availability:* Available from the authors and from MDPI.

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