

DEHYDROGENATION OF 4-OXOTETRAHYDROINDOLES  
OVER A RANEY NICKEL CATALYST

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4-Hydroxyindole derivatives are formed in the dehydrogenation of 4-oxotetrahydroindoles over palladium [1-3], but the yields are usually low.

We have found that the dehydrogenation of 4-oxotetrahydroindoles proceeds readily to give high yields, particularly for 1-substituted compounds, when they are refluxed in xylene with Raney nickel. Thus, 2-carbethoxy-3-methyl-4-hydroxyindole with mp 183-184° (from alcohol) was obtained in 59% yield. IR spectrum: 3320 (OH), 3220 (NH), and 1585  $\text{cm}^{-1}$ . Found: C 65.5; H 6.2; N 6.4%.  $\text{C}_{12}\text{H}_{13}\text{NO}_3$ . Calculated: C 65.7; H 6.0; N 6.4%. 1,3-Dimethyl-2-carbethoxy-4-hydroxyindole with mp 128-129° (from alcohol) was obtained in 90% yield. Found: C 66.9; H 6.6; N 6.0%.  $\text{C}_{13}\text{H}_{15}\text{NO}_3$ . Calculated: C 66.9; H 6.5; N 6.0%.

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