The Syntheses of Uleine and 3-*epi*-Uleine

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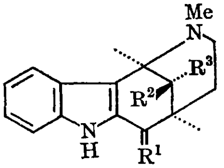
Two different synthetic approaches[1,2] have successfully led to racemic dasycarpidone (I; R^1=O, R^2=Et, R^3=H) and racemic 3-epi-dasycarpidone (I; R^1=O, R^2=H, R^3=Et). We record here the conversions of these two bases into racemic uleine (I; R^1=CH_2, R^2=Et, R^3=H) and racemic 3-epi-uleine (I; R^1=CH_2, R^2=H, R^3=Et) respectively in each case identified by i.r., u.v., mass spectroscopic and t.l.c. comparisons with the natural alkaloids,[3] which complete the first total syntheses of these two systems. Treatment of 3-epi-dasycarpidone with magnesium amalgam–methylene iodide[4] at 25° for 2 hr. gave a 35% yield of 3-*epi*-uleine. An analagous approach failed to convert dasycarpidone into uleine. This conversion was achieved however in 20% yield by a Wittig reaction with methylenetriphenylphosphorane in dimethyl sulphoxide solution at 45°.



(I)

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