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3:4-DIHYDRO-1-2'-NITROBENZYLISOQUINOLINE

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In a recent publication, Hey and Lobo¹ have reported that contrary to the claim of Späth and Hromatka,² the cyclization of 3:4-dimethoxy-2-nitrophenyl-*N*-phenethylacetamide could not be achieved. In agreement with earlier reports^{3,4} their attempts at cyclization of 2-nitrophenyl-*N*-phenethylacetamide were also unsuccessful. We have found that the cyclization of 2-nitrophenyl-*N*-phenethylacetamide to 3:4-dihydro-1-2'-nitrobenzyl isoquinoline can be achieved in *ca.* 25% yield by following the procedure of Späth and Hromatka. The dihydroisoquinoline, m.p. 115–116° (Found: C, 72.0; H, 5.3; N, 10.8. $C_{16}H_{14}O_2N_2$ requires C, 72.2; H, 5.3; N, 10.5%), yielded a methiodide, m.p. 209° (decomp.) (Found: C, 50.5; H, 4.4; N, 6.8. $C_{17}H_{17}O_2N_2I$ requires C, 50.0; H, 4.2; N, 6.9%). Reduction of the latter in alcoholic solution in presence of Adams's catalyst yielded 1-2'-aminobenzyl-1:2:3:4-tetrahydro-2-methylisoquinoline characterized as the dihydrochloride, m.p. 248–250° (Found: C, 63.0; H, 6.5; N, 8.6. $C_{17}H_{22}N_2Cl_2$ requires C, 62.8; H, 6.8; N, 8.6%). Gadamer *et al.*³ have prepared the last compound by an entirely different procedure and report the melting point of the dihydrochloride to be 247–250°.

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References

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