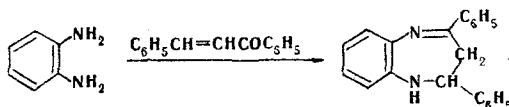


SYNTHESIS OF 2,4-DIPHENYL-2,3-DIHYDRO-1H-1,5-BENZODIAZEPINE

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We have found that 2,4-diphenyl-2,3-dihydro-1H-1,5-benzodiazepine rather than a benzimidazole derivative is formed when alcohol solutions of equimolar amounts of chalcone and o-phenylenediamine are refluxed for 7 h in the presence of triethylamine. The yield of product with mp 129-129.5°C (from methanol) was 75%. IR spectrum (KBr): 3359 (N-H) and 1606 cm^{-1} (C=N). UV spectrum (in octane), λ_{max} (ϵ): 370 nm (5310). PMR spectrum (CDCl_3): 3.03 (2H, octet, CH_2), 3.68 (1H, s, N-H), and 5.05 ppm (1H, q, CH). The N-acetyl derivative had mp 171°C (from methanol). The results of elementary analysis were in agreement with the calculated values.



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