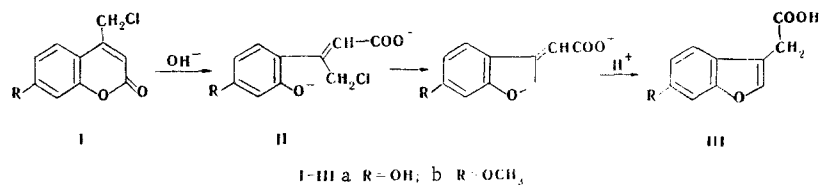


NEW METHOD FOR THE SYNTHESIS OF 3-BENZOFURYLACETIC ACIDS

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We have observed that 4-chloromethylcoumarins (I) undergo recyclization to 3-benzofurylacetic acids (IV) when they are refluxed in an aqueous alkali medium.



The reaction evidently proceeds through intramolecular substitution of the chlorine atom in the open ring (II).

Acid IIIa, with mp 139-140°C, was obtained in 92% yield. IR spectrum: 1710 cm⁻¹ (C = O). PMR spectrum (CF₃COOH): 3.4 (s, CH₂) and 6.4-7.1 ppm (m, aromatic H). Acid IIIb, with mp 96-97°C, was obtained in 91% yield. IR spectrum: 1710 cm⁻¹ (C = O). PMR spectrum (CF₃COOH): 3.4 (s, CH₂), 3.6 (s, CH₃), and 6.4-7.1 ppm (m, aromatic H).

The results of elementary analysis of III were in agreement with the calculated values.