Synthesis of oxindolyl-pyrimidines and oxindolyl-furopyrimidines from isatin-derived propargylic alcohols

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Abstract

A Brønsted acid-catalyzed reaction of 6-amino uracil and isatin-derived propargylic alcohols for the synthesis of a series of oxindole-fused pyrimidine in good-to-high yields was achieved (up to 94%). Furthermore, the reaction of isatin-derived propargylic alcohols and 1,3-dimethylbarbituric acid or ethyl 3-aminocrotonate gave oxindoles containing furopyrimidine or pyrrole, respectively, in moderate-to-good yields under relatively mild reaction conditions.

Keywords: Amino uracil, Oxindol, Oxindolyl-furopyrimidine, Oxindolyl, pyrimidine, Propargylic alcohols