PR-7

GREEN SYNTHESIS OF 2-AMINO-3-CYANO-4H-CHROMEN-4-YLPHOSPHONATES

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Abstract. A facile and highly efficient and green synthetic protocol is developed for the bioactive 2-amino-3-cyano-4*H*-chromen-4-ylphosphonates by the one-pot reaction of various salicylaldehydes, malononitrile, and diethyl phosphite using sulfamic acid as an efficient, reusable and heterogeneous solid acid catalyst. All the synthesized compounds were characterized by their ¹H-NMR, ¹³C-NMR, ³¹P-NMR and Mass spectral studies.