

Alfionita, Devi, 2019, Pengaruh Substituen Fluoro dan Metoksi terhadap Reaksi Aldol pada Sintesis Turunan bis-stiril-fenil-dihidropirimidin-tion, Skripsi di bawah bimbingan Dr. Hery Suwito, M.Si. dan Kautsar Ul Haq, S.Si., M.Si., Departemen Kimia, Fakultas Sains dan Teknologi, Universitas Airlangga.

ABSTRAK

Pengembangan metode sintesis turunan bis-stiril-fenil-dihidropirimidin-tion dengan beberapa modifikasi terus dilakukan untuk memperoleh hasil yang baik serta dapat meningkatkan bioaktivitasnya. Pada penelitian ini, dua turunan bis-stiril-fenil-dihidropirimidin-tion telah berhasil disintesis dengan menerapkan reaksi kondensasi aldol dan *vinylogous aldol* menggunakan *para*-anisaldehida (MT-1) dan 4-fluorobenzaldehida (MT-2). Sintesis dilakukan pada suhu kamar dan suhu 50°C. Struktur molekul ditentukan dengan UV-Vis, FT-IR, dan NMR (¹H dan ¹³C APT). Hasil produk yang diperoleh untuk MT-1 6,7% (suhu kamar) & 10,9% (suhu 50°C) serta untuk MT-2 9,3% (suhu kamar) & 21,8% (suhu 50°C).

Kata kunci : Hibridisasi molekul, bis-stiril DHPM, *para*-anisaldehida, 4-fluoro benzaldehida, dan Kondensasi Aldol

Alfionita, Devi, 2019, The Effect of Fluoro And Methoxy Substituents on Aldol Reaction in The Synthesis of Bis-styryl-phenyl-dihydropyrimidine-thione Derivatives, The script was under guidance of Dr. Hery Suwito, M.Si. and Kautsar Ul Haq, S.Si., M.Si., Department of Chemistry, Faculty of Science and Technology, Airlangga University.

ABSTRACT

Developing of synthesis method of bis-styryl-phenyl-dihydropyrimidine-thione derivatives by some modifications are still in progress in order to obtain better yield and to enhance the bioactivity. In this research, two derivatives of bis-styryl-phenyl-dihydropyrimidine-thione were successfully synthesized by aldol and vinylogous aldol condensation using *para*-anisaldehyde (MT-1) and 4-fluorobenzaldehyde (MT-2). Synthesis was performed in room temperature and at 50°C. Molecular structure of the prepared compounds was determined by UV-Vis, FT-IR, and NMR (¹H and ¹³C APT). The product yield obtained for MT-1 6,7% (room temperature) & 10,9% (T = 50°C) and for MT-2 9,3% (room temperature) & 21,8% (T = 50°C).

Keywords: *Molecular hybridization, bis-styryl DHPM, para-anisaldehyde, 4-fluorobenzaldehyde, and Aldol condensation*