

ABSTRACT

SYNTHESIS OF 6-[(DIPHENYLAMINO)METHYL]PINOSTROBIN BY WAY OF MANNICH REACTION USING PINOSTROBIN AS STARTING MATERIAL

Stefanus Ardi Kosasih

Previous studies showed that pinostrobin have a lot of bioactivities, such as antimicrobial, antiinflammation, and cytotoxic activities. To increase its bioactivity, we introduced aminomethyl substituent into the structure of pinostrobin by using Mannich reaction. The first step was reaction between diphenylamine as secondary amine and formaldehyde to obtain iminium ion. The second step was reaction between pinostrobin react with iminium ion to give reaction product. The product was purified by column chromatography to give a purified product, which was analysed using IR and H-NMR spectroscopy to determine its structure, and it was concluded that 6-[(diphenylamino)methyl]pinostrobin was not obtained.

Keywords: Pinostrobin, Mannich Reaction, 6-[diphenyl(amino)methyl] pinostrobin, diphenylamine, Formaldehyde

/