ABSTRACT

SYNTHESIS OF 6-(MORPHOLIN-4-YLMETHYL)PINOSTROBIN BY WAY OF MANNICH REACTION WITH PINOSTROBIN AS STARTING MATERIAL

Rohmatul Mufarridah

This research was conducted to synthesize 6-(morpholin-4-ylmethyl)pinostrobin as the target compound. The synthesis itself consists of two steps. Firstly, morpholine was reacted with formalin to obtain iminium ion as the intermediate product. Shortly afterwards, the second step of the reaction was taken place between pinostrobin and the iminium ion that had been obtained from the first step reaction. This step was run in three different reaction times; 30, 45 and 60 minutes respectively. The product was then purified by column chromatography to get a pale yellow solid without specific aromatic odor. The structure of this new pinostrobin derivative were confirmed by its IR and H-NMR spectra. The highest percentage yield of 33% was obtained in 45 minutes of reaction.

Keywords: Mannich reaction, Pinostrobin, 6-(morpholin-4-ylmethyl)pinostrobin, Formaldehyde, Morpholine