

ABSTRACT
SYNTHESIS OF 6-(PYRROLYLMETHYL)PINOSTROBIN
BY WAY OF MANNICH REACTION
USING PINOSTROBIN AS STARTING MATERIAL

I Gede Ari Sumartha

This research was conducted to synthesize 6-(pyrrolylmethyl)pinostrobin as the target compound to increase bioactivity of pinostrobin by using Mannich reaction. The synthesis itself consists two steps. The first step, pyrrole was reacted with formaldehyde to obtain Schiff base as the intermediate product. The second step was reaction between pinostrobin and the Schiff base that had been obtained from the first step reaction to give reaction product. The product was analysed using IR and H-NMR spectroscopy to conclude that Mannich reaction using pyrrole as secondary amine under this condition did not give the target compound. It is because of the low reactivity of pyrrole as nucleophile and its potency to polymerization under acidic condition.

Keywords: Mannich reaction, Pinostrobin, 6-(pyrrolylmethyl)pinostrobin, Formaldehyde, Pyrrole