

## BAB 5

### KESIMPULAN DAN SARAN

#### 5.1 Kesimpulan

1. Senyawa 4-metoksikhalkon dapat disintesis secara konvensional dan dengan bantuan iradiasi gelombang mikro.
2. Rendemen sintesis 4-metoksikhalkon secara konvensional ( $83,61 \pm 14,85\%$ ) lebih besar dibanding dengan sintesis dengan bantuan iradiasi gelombang mikro ( $52,82 \pm 11,73\%$ ).
3. Reaksi antara 4-metoksiasetofenon dengan 2-nitrobenzaldehyd tidak menghasilkan derivat senyawa khalkon namun menghasilkan senyawa 3-hidroksi-1-(4-metoksifenil)-3-(2-nitrofenil)propan-1-on secara metode konvensional ( $59,25 \pm 11,72\%$ ).
4. Reaksi antara 4-metoksiasetofenon dengan 2-nitrobenzaldehyd belum berhasil menghasilkan senyawa khalkon dengan bantuan iradiasi gelombang mikro.
5. Adanya substituen gugus nitro posisi orto pada 2-nitrobenzaldehyd menyebabkan belum terbentuknya senyawa 4-metoksi-2'-nitrokhalkon dengan konsentrasi NaOH 0,125 mmol baik secara konvensional maupun iradiasi gelombang mikro.

#### 5.2 Saran

1. Penelitian berikutnya untuk sintesis senyawa 4-metoksikhalkon dengan bantuan iradiasi gelombang mikro dapat dilakukan dengan menggunakan daya yang lebih besar.
2. Sintesis 4-metoksi-2'-nitrokhalkon disarankan menggunakan katalis asam karena dalam katalis basa dapat menyebabkan reaksi *Baeyer-Drewsen* yang merupakan sintesis dari *indigo dye*.

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