BAB 5
KESIMPULAN DAN SARAN

5.1 Kesimpulan

Berdasarkan hasil dari penelitian yang dilakukan, dapat disimpulkan bahwa:

1. Katalis barium hidroksida dapat digunakan untuk mensintesis senyawa 2,5-dibenzilidensiklopentanon melalui reaksi kondensasi Claisen-Schmidt dengan bantuan iradiasi gelombang mikro (480 Watt, 10 menit) dengan rendemen yang dihasilkan sebesar 74,6%.
2. Katalis barium hidroksida pada konsentrasi dan kondisi reaksi yang sama dapat digunakan untuk mensintesis senyawa 2,5-bis(4-hidroksi-3-metoksibenziliden)siklopentanon dengan rendemen yang lebih kecil yaitu sebesar 6,0%.
3. Adanya gugus hidroksi dan metoksi pada vanilin mempersulit penyerangan nukleofil pada tahap mekanisme reaksi adisi nukleofilik sehingga reaksi sintesis senyawa 2,5-bis(4-hidroksi-3-metoksibenziliden)siklopentanon belum sempurna dibandingkan dengan reaksi sintesis 2,5-dibenzilidensiklopentanon pada kondisi reaksi yang sama.
4. Konsentrasi barium hidroksida sebagai katalis yang terbaik untuk sintesis senyawa 2,5-bis(4-hidroksi-3-metoksibenziliden)-siklopentanon adalah 4 molEq dibandingkan dengan 2 dan 3 molEq yang ditinjau dari persen luas area relatif dengan uji KLT-densitometri yaitu sebesar 20,9%.

5.2 Saran

1. Pada sintesis senyawa 2,5-bis(4-hidroksi-3-metoksibenziliden)-siklopentanon dengan bantuan iradiasi gelombang mikro sebaiknya diperpanjang lama waktu reaksi untuk meningkatkan hasil sintesis senyawa.
2. Pada sintesis senyawa 2,5-bis(4-hidroksi-3-metoksibenziliden)-siklopentanon dengan bantuan iradiasi gelombang mikro sebaiknya daya pada sintesis ditingkatkan untuk meningkatkan hasil sintesis senyawa.

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