



BAB V

KESIMPULAN DAN SARAN

5.1 Kesimpulan

Berdasarkan hasil percobaan yang telah dilakukan, dapat disimpulkan bahwa :

1. Kondisi terbaik untuk menghasilkan kokristal kurkumin adalah dengan menggunakan rasio massa akuades-*xylitol* sebesar 1:15 dan temperatur pemanasan sebesar 90°C.
2. Proses kokristalisasi dengan metode pelarutan-pendinginan dan menggunakan *xylitol* sebagai koformer dapat meningkatkan kelarutan sebesar ± 285 kali.
3. Semakin meningkatnya rasio kurkumin-*xylitol* maka semakin meningkat pula nilai kelarutan kurkumin di dalam air.
4. Semakin besar rasio massa kurkumin-*xylitol* maka kadar kurkumin semakin sedikit.
5. Proses kokristalisasi berpengaruh dalam peningkatan stabilitas kurkumin terhadap pH dan cahaya.

5.2 Saran

Berdasarkan hasil percobaan yang telah dilakukan, ada beberapa saran yang dapat diberikan untuk penelitian selanjutnya, yaitu :

1. Perlu penelitian lebih lanjut apakah produk kokristalisasi dapat diaplikasikan sebagai bahan aditif pada makanan (pewarna makanan) atau tidak.
2. Diperlukan adanya uji dengan berdasarkan parameter fisika, kimia, dan mikrobiologi terhadap produk untuk memastikan apakah produk bisa dikonsumsi atau tidak.
3. Mengembangkan cara kerja lebih lanjut agar produk dapat diproduksi secara massal didasarkan manfaat kurkumin yang baik bagi tubuh manusia.



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