BAB V
KESIMPULAN DAN SARAN

5.1 Kesimpulan

Pada penelitan "Pengaruh Tekanan dan Temperatur terhadap Perolehan Minyak Biji Pepaya Hasil Ekstraksi scCO_2", didapatkan kesimpulan sebagai berikut:

1. Temperatur 40°C merupakan variasi temperatur terbaik untuk mendapatkan persentase *yield* minyak terbesar dengan ekstraksi superkritik CO_2. Perolehan minyak berbanding terbalik dengan temperatur.
2. Tekanan 250 bar merupakan variasi tekanan terbaik untuk mendapatkan persentase *yield* minyak terbesar dengan ekstraksi superkritik CO_2. Perolehan minyak berbanding lurus dengan tekanan.
3. Pada ekstraksi superkritik CO_2 kondisi 40°C dan 250 bar didapatkan *yield* optimum sebesar 3,42%.
4. Analisa minyak biji pepaya menggunakan *GC-MS* didapatkan kandungan asam lemak paling dominan berupa asam palmitat sebesar 0,96% dan diikuti dengan asam oleat sebesar 0,50%.

5.2 Saran

1. Perlunya penelitian lebih lanjut mengenai pengaruh variasi tekanan dan temperatur pada *yield* dan komposisi minyak biji pepaya.
2. Perlunya pengembangan penelitian ekstraksi superkritik CO_2 dengan menggunakan *co-solvent* untuk memperbesar persentase *yield* minyak dari biji pepaya.
3. Perlunya dilakukan *dynamic time* yang lebih lama dan penambahan *flowrate* CO_2 agar mengurangi kemungkinan tertinggalnya minyak yang di *pipeline*.

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