

BAB 5

KESIMPULAN DAN SARAN

5.1 Kesimpulan

Berdasarkan hasil penelitian uji aktivitas *in vitro* kemampuan menghambat denaturasi albumin dari ekstrak dan fraksi Bajakah Tampala, beberapa Kesimpulan yang dapat ditarik antara lain:

1. Karakteristik fisika ekstrak etanol 70 % hasil sonikasi menunjukkan rendemen sebesar 80%, memiliki tekstur kental, berwarna coklat kemerahan serta bau khas. Fraksi n-hexan berwarna pucat kehijauan, bau khas, dan berminyak, dan fraksi etil asetat berwarna coklat pekat, tekstur kental dan berbau khas. Berdasarkan karakteristik kimia menggunakan hasil dari KLT yang menunjukkan bahwa ekstrak dan fraksi Bajakah Tampala terindikasi mengandung senyawa golongan senyawa flavonoid dan fenolik yang ditunjukkan oleh profil kromatogram, nilai R_f, serta respon terhadap penampak bercak dan pembanding yaitu kuersetin dan asam galat. Fraksi etil asetat menghasilkan noda terbanyak sehingga menunjukkan pemisahan senyawa berdasarkan tingkat kepolaran yang berlangsung dengan optimal.
2. Aktivitas penghambatan denaturasi albumin dari seluruh larutan uji menunjukkan bahwa semua larutan uji mampu menghambat proses denaturasi albumin. Diantara seluruh larutan uji, fraksi air menunjukkan aktivitas paling tinggi dengan nilai inhibisi sebesar 52,5% pada konsentrasi 10 ppm. Respon setiap larutan uji pada peningkatan konsentrasi menunjukkan pola yang berbeda. Pola pada fraksi air dan etil asetat cenderung menurun pada konsentrasi 100 ppm, sedangkan pada ekstrak dan n-heksan mengalami peningkatan.

Hal ini mengindikasikan bahwa fraksi air memiliki prospek paling baik sebagai antiinflamasi alami.

5.2 Saran

Berdasarkan penelitian yang telah dilakukan, terdapat beberapa saran untuk pengembangan penelitian selanjutnya, antara lain:

1. Identifikasi senyawa aktif pada fraksi air menggunakan instrumen GC-MS atau LC-MS/MS guna mengetahui senyawa spesifik yang bertanggung jawab terhadap aktivitas antiinflamasi.
2. Metode uji penghambatan denaturasi albumin perlu disempurnakan dengan menambahkan kontrol sampel tanpa proses pemanasan pada setiap konsentrasi.
3. Melakukan uji aktivitas antiinflamasi yang lebih spesifik melalui penghambatan enzim siklooksigenase (COX-1 dan COX-2).
4. Mengoptimalkan pemisahan metode kromatografi lapis tipis (KLT).
5. Pengujian dengan variasi konsentrasi yang lebih luas dan bertingkat, khususnya pada fraksi air dan etil asetat, agar nilai IC_{50} dapat dihitung secara akurat.

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