

BAB IV

PANDANGAN PENULIS

Tanaman *A. indica* memiliki banyak potensi dalam pengobatan baik pengobatan tradisional maupun pengobatan modern. Selain itu tanaman ini juga bisa diaplikasikan untuk pemanfaatan material maju, pemanfaatan di lingkungan dan juga dalam bidang energi seperti yang sudah dijelaskan. Tanaman ini juga termasuk tanaman yang mudah ditemukan secara melimpah karena lokasi tempat tumbuh tanaman ini yang bisa ditemukan tumbuh liar di pekarangan rumah, pinggir jalan, lapangan rumput maupun lereng gunung dan juga bisa dilakukan pembudidayaan. Dari pembahasan aktivitas farmakologi, peneliti banyak menyoroti antioksidan dari tanaman ini yang menunjukkan pengobatan penyembuhan yang sangat signifikan. Senyawa aktif dari ekstrak *A. indica* seperti yang ditunjukkan pada tabel I.1. yang diharapkan dapat berperan sebagai agen antioksidan. Dengan begitu, sumber daya alam ini harus diperluas dan dikembangkan menjadi produk obat sekunder dengan alternatif yang tersedia dan juga sebagai sumber daya yang digunakan untuk material maju.

Selain itu beberapa jenis penelitian yang menggunakan *A. indica* dengan mensintesis nanopartikel ZnO yang diaplikasikan pada pelapis tekstil, hidrofobisitas, ketahanan UV, serta aktivitas antibakteri dan juga pembuatan nanopartikel ZrO₂ yang digunakan sebagai pengantar obat. Tanaman ini juga bisa diaplikasikan sebagai fitoremediasi dimana penggunaan tanaman *A. indica* untuk menghilangkan atau menghancurkan kontaminan dari lingkungan, baik itu senyawa organik maupun senyawa anorganik. Oleh karena itu, pemanfaatan tanaman ini bisa menjadi sorotan untuk studi masa depan dan bisa menjadi celah untuk mendorong para peneliti dalam

menggunakan tanaman *A. indica* sebagai bahan baku yang digunakan. Untuk metode ekstraksi *A. indica* dari beberapa yang digunakan, metode soxhlet banyak digunakan peneliti untuk mengekstrak tanaman *A. indica* dan menjadi metode ekstraksi terbaik untuk memperoleh hasil ekstrak yang banyak dan juga pelarut yang digunakan lebih sedikit, waktu yang digunakan juga lebih cepat dan sampel diekstraksi secara sempurna karena dilakukan berulang-ulang. Parameter yang paling berpengaruh terhadap proses ekstraksinya yaitu ukuran partikel bahan, pelarut dan kondisi operasi yang digunakan.

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