Uji stabilitas mikroemulsi ekstrak daun seledri dan mikroemulsi ekstrak daun urang aring dan efektivitasnya terhadap pertumbuhan rambut tikus jantan spraque dawley = The stability test of microemulsion leaf extract celery and microemulsion leaf extract urang aring and the effectiveness of hair growth male spraque dawley rats

Tambunan, Lidia Romito, author

Abstrak

Seledri dan urang aring adalah tanaman yang memiliki efek terhadap pertumbuhan rambut. Kandungan kimia yang terdapat dalam tanaman tersebut kaya akan nutrisi yang dibutuhkan untuk pertumbuhan rambut , seperti flavonoid, saponin, sterol/terpenoid, dan tanin. Ekstrak etanol diformulasikan dalam sediaan mikroemulsi dengan tiga jenis formula, yaitu ekstrak seledri 10% (formula A), ekstrak urang aring 10% (formula B), dan kombinasi ekstrak seledri 5% dan urang aring 5% (formula C). Mikroemulsi diaplikasikan ke kulit punggung tikus yang telah dicukur. Tujuan penelitian ini adalah membuat mikroemulsi yang jernih, menguji stabilitas fisik dan aktivitas dari mikroemulsi tersebut. Efikasi formulasi ditentukan melalui perhitungan panjang rambut tikus. Hasil menunjukkan bahwa mikroemulsi jernih, tidak terjadi pemisahan fase, dan homogen secara fisik. Hasil uji stabilitas fisik menunjukkan ketiga mikroemulsi stabil pada penyimpanan suhu rendah, suhu kamar, dan suhu tinggi. Efek yang paling potensial terhadap pertumbuhan rambut tikus adalah mikroemulsi dengan konsentrasi ekstrak urang aring 10%.

.....

Celery and urang aring are plants having effect on hair growth. The chemical constituents in these plants are rich of nutrients for hair growth such as flavonoids, saponins, steroids/terpenoids, and tannins. The ethanol extract was formulated into microemulsions with three different kinds of formula which were 10% extract of celery (formula A), 10% extract of urang aring (formula B), and combination of 5% extract of celery and 5% extract of urang aring (formula C). Microemulsions were topically applied to the dorsal skin of rats which had been shaved before. The research aim is to formulate a clear microemulsion and to test the physical stability and activity of the microemulsion. The efficacy of the formulation was determined by measuring the length of the hair rats. The experiment result showed that the microemulsions were clear, no phase separation, and were physically homogeneous. The result of physical stability tests showed that all the three microemulsions were stable at low temperature, room temperature, and high temperature. The most potential effect on rats hair growth of is the microemulsion with 10% urang aring extract.