

Uji aktivitas antioksidan teh celup kombinasi rimpang temulawak (*Curcuma xanthorrhiza* Roxb.) dan rimpang temu mangga (*Curcuma mangga* Val.) dengan metode peredaman radikal DPPH = antioxidant activity test of the tea bags preparation of ginger rhizome (*Curcuma xanthorrhiza* Roxb.) and mangga Rizhome (*Curcuma mangga* Val.) combination with DPPH free radical scavenging method

Puji Ariany, author

Deskripsi Dokumen: <https://lib.ui.ac.id/bo/uiibo/detail.jsp?id=20374361&lokasi=lokal>

Abstrak

Temulawak dan temu mangga merupakan tanaman obat yang sering digunakan dalam pengobatan tradisional. Kedua tanaman ini sudah diteliti dan berpotensi sebagai penghambat aktivitas radikal bebas. Dalam penelitian ini, dilakukan standarisasi simplisia terhadap Rimpang Temulawak (*Curcuma xanthorrhiza*) dan Rimpang Temu Mangga (*Curcuma mangga*), meliputi beberapa parameter yaitu kadar air, kadar abu total, kadar abu tak larut asam, kadar sari terlarut air, kadar sari terlarut etanol, pola kromatogram, kadar kurkuminoid. Simplisia yang sudah diuji berbagai parameter ini dikombinasikan menjadi sediaan teh herbal dalam berbagai perbandingan (10:0, 7:3, 5:5, 3:7 dan 0:10) dan dilakukan uji penghambatan aktivitas antioksidan secara in vitro dengan menggunakan standard kuersetin sebagai pembanding. Seduhan teh dari Rimpang Temulawak tunggal memiliki aktivitas penghambatan terhadap radikal DPPH lebih baik daripada Rimpang Temu Mangga tunggal, dengan Nilai IC₅₀ seduhan rimpang temulawak (356,23 g/mL), seduhan rimpang temu mangga (403,231 g/mL), seduhan kombinasi 7:3 (424,495 g/mL), seduhan kombinasi 5:5 (449,493 g/mL), dan seduhan kombinasi 3:7 (461,888 g/mL). Aktivitas antioksidan terbaik didapatkan pada teh herbal rimpang temulawak, dengan IC₅₀ 356,23 g/mL. Rimpang Temulawak memiliki aktivitas penghambatan yang paling baik dengan nilai IC₅₀ sebesar 356,23 g/ml walaupun kurang berpotensi sebagai antioksidan.

.....

"Temulawak" and "Temu Mangga" are a medicinal plant commonly used in traditional medicine. Both of these plants have a potential inhibitor of free radical activity. In this research, standardization of botanicals against rhizome temulawak (*Curcuma xanthorrhiza*) and Rhizome temu mangga (*Curcuma mangga*) were done, includes several parameters such as moisture content, total ash, acid insoluble ash, water soluble extract levels, levels of dissolved ethanol extract, chromatogram patterns, levels of curcuminoids. Simplisia various parameters that have been tested are combined into herbal tea preparation in a variety of comparisons (10:0, 7:3, 5:5, 3:7 and 0:10) and the inhibition test in vitro antioxidant activity using quercetin as standard comparison. Steeping tea from a single rhizome *Curcuma* have inhibitory activity against DPPH radicals better than any single rhizome Temu Mangga, with IC₅₀ value steeping ginger rhizome (356.23 mg / mL), steeping rhizome Intersection mango (403.231 mg / mL), steeping a combination of 7: 3 (424.495 mg / mL), steeping a combination of 5:5 (449.493 mg / mL), and steeping a combination of 3:7 (461.888 mg / mL). Best antioxidant activity was found in herbal tea ginger rhizome, with IC₅₀ 356.23 mg / mL. Ginger rhizome has the best inhibitory activity with IC₅₀ values of 356.23 ug / ml, although less potential as an antioxidant.