

## **ABSTRAK**

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Judul : Uji Aktivitas Penghambatan Ekstrak Daun Singawalang (*Petiveria alliacea*) terhadap Enzim Tirosinase.

Tirosinase merupakan salah satu enzim yang berperan dalam pembentukan pigmen kulit dari seseorang karena terlibat dalam proses melanogenesis (proses biosintesis melanin). Mengingat enzim tirosinase sangat berperan terhadap proses depigmentasi kulit, terdapat beberapa upaya untuk menghambat proses depigmentasi kulit salah satunya menghambat tirosinase. Penelitian pada daun singawalang (*Petiveria alliacea*) dilakukan untuk mengetahui adanya potensi sebagai inhibitor tirosinase. Ekstrak daun singawalang (*Petiveria alliacea*) dimaserasi dengan etanol, ekstrak singawalang mengandung metabolit sekunder tannin, alkaloid, dan steroid. Aktivitas penghambat tirosinase menggunakan teknik *microplate reader* ELISA pada panjang gelombang 492 nm. Pengujian dilakukan terhadap asam kojat sebagai pembanding dan L-DOPA sebagai substrat. Hasil uji aktivitas penghambatan tirosinase oleh ekstrak etanol daun singawalang dan asam kojat, masing-masing menunjukkan IC<sub>50</sub> sebesar 9,817 mg/mL dan 0,089 mg/mL

Kata kunci : Enzim Tirosinase, Ekstrak Daun Singawalang

## **ABSTRACT**

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Title : Singawalang Leaves Extract as Inhibitor of Tyrosinase Enzyme

Tyrosinase is an enzyme that plays a role in the formation of skin pigments from a person because it is involved in the process of melanogenesis (the process of biosynthesis of melanin). The tyrosinase enzyme plays a role in the skin depigmentation process, one of which inhibits tyrosinase. Singawalang leaves (*Petiveria alliacea*) was carried out to determine the potential as an inhibitor tyrosinase. Singawalang leaves extract (*Petiveria alliacea*) macerated with ethanol. Tests were performed on kojic acid as a comparison and L-DOPA as a substrate. The results of tyrosinase inhibition activity by ethanol extract of singawalang leaves and kojic acid, respectively showed IC<sub>50</sub> of 9.817 mg / mL and 0.089 mg / mL.

Keywords: Tyrosinase inhibition activity, singawalang leaves, extract ethanol