ABSTRACT

Penetration of liposome and ethosome of ethanol 96% extract of *Curcuma heyneana* in vivo test on rat skin

Rohmania

The purpose of this research is to determine skin penetration of liposome and ethosome of ethanol 96% extract of *Curcuma heyneana* rhizome. The sample was applied on rat skin and observed after 60 minutes. The ability of ethosome, liposome and extract to deliver active compound to the deep layers of the skin were investigated by using a fluorescent microscope. The penetration of ethosome, liposome, and extract were analyzed by Non parametric kruskall-wallis and followed by Mann-Whitney. It was concluded that ethosome and liposome gave deeper penetration than extract and ethosome gave deeper penetration than liposome.

Keywords : Temu giring rhizome, *Curcuma heyneana*, liposome, ethosome, and penetration.