

ABSTRACT

Macroscopic – Microscopic Observation and Phytochemical Screening of *Curcuma heyneana* Rhizome (Sumenep and Magelang)

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Curcuma heyneana is one of medical plant from Indonesia. In Sumenep it is called as temu late and in Magelang it is called as temu giring. It belongs to Family Zingiberaceae, which are widely distributed throughout the tropics particularly in Southeast Asia. The rhizome has been used as a traditional medicine and woman traditional cosmetic in Sumenep, Madura-East Java. The rhizomes of temu giring in Java are used to treat diarrhea and typhus.

Due to the different appearance of *C. heyneana* from Sumenep and Magelang the purpose of this study was to observe the macroscopic and microscopic morphology. And to compare the content of chemical compounds through phytochemical screening. Especially terpenoids, alkaloids, flavonoids and simple phenolic compound.

The method used in this study were macroscopic observation of rhizome and rhizome powder including organoleptic observation (color, taste and odor), microscopic observation by observing slices of the rhizomes and observing fragments of rhizomes powder. Phytochemical screening includes screening of flavonoids, alkaloids, terpenoids and simple phenolic compound.

Based on this study, it can be concluded that there were differences of morphology between *C. heyneana* rhizome from Sumenep with *C. heyneana* rhizome from Magelang. These differences can be seen in color, taste and odor and chemical contents especially in terpenoids. *C. heyneana* from Sumenep has four spots but in *C. heyneana* from Magelang has three spots after elution in the same condition (mobile phase = n-hexane : ethyl acetate (4:1) and stationary phase = Kiesel Guhr Plate 254). It was concluded that *Curcuma heyneana* from Sumenep and Magelang show differences in morphology of the rhizome and chemical contents.

Keywords : *Curcuma heyneana*, temu late, temu giring, Zingiberaceae, flavonoids, alkaloids, terpenoids, Sumenep, Magelang, phytochemical screening.