ABSTRACT (LITERATURE REVIEW)

IDENTIFICATION OF DICLOFENAC SODIUM IN HELBAL MEDICINE OF RHEUMATISM POWDER USING THE THIN LAYER CHROMATOGRAPHY (TLC)

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Herbal medicine of rheumatism is one of the traditional Indonesian medicinal product that has been used for generations to maintain health. Generally, herbal medicine is made from natural ingredients, in the form of parts from plants and animals. The increasing use of herbal medicine has caused some herbal medicine manufacturers to add medicinal chemicals to their herbal products. One of the medicinal chemicals which is commonly added in the sore herbal medicine is diclofenac sodium. The aims this study is analyze the chemical content of diclofenac sodium drug in the sore herbal medicine dosage form. This research uses the literature review method using the Google Scholar online database with 3 reviewed national journal. In the three journals using the thin layer chromatography (TLC) method with silica gel as a stationary phase and a different mobile phase, the first article uses ethyl acetate: n-hexane (7:3), the second article uses ethyl acetate: glacial acetic acid: toluene (60:40). :1) and the third article toluene: ethyl acetate: glacial acetic acid (60:40:1) and toluene: acetone (1:2) with varying samples for each, the first article and third using 10 samples and the second article 7 samples. The results of the analysis identified positive samples as indicated by the similarity of the RF values of the herbal samples compared to the standard dicolfenac sodium. In the three articles there were 3 positive samples of diclofenac sodium each. Based on the results of the research carried out, it can be concluded that the herbal aches and pains circulating in the cities of Mataram, Makassar and Purwodadi contain the medicinal chemical sodium diclofenac and it is recommended that research be carried out using a mobile phase combination of ethyl acetate: n-hexane (7:3) and a combination of eluents. toluene: ethyl acetate: glacial acetic acid (60:40:1) and silica gel as stationary phase which refers to the first journal and second journal.

Keywords: Diclofenac sodium, Reumathic herbals, Thin layer chromatography (TLC)