

ABSTRACT

OPTIMIZATION OF SOLUTION USED IN IN-VITRO DETERMINATION OF ANTICHOLESTEROL ACTIVITY

Asseghaf Khoiruddin Fathur Rizal

Hypercholesterolemia is a condition when cholesterol levels in the blood are too high. If you don't get treatment right away, it's possible that cholesterol builds up which can lead to narrowing of blood vessels, increasing the risk of stroke or heart attack. The purpose of this study was to determine what solvents were able to dissolve cholesterol and purple sweet potato leaf extract of Antin-3 variety. This test was carried out in 2 stages, namely making a standard solution (cholesterol standard) and determining the anticholesterol potential of the extract with Leiberman-Burchard reagent. The first preparation was carried out with chloroform solvent. A standard solution was prepared and the result was max 666.0nm and on the determination of the anticholesterol potential of the insoluble extract with chloroform. The second preparation with 10% DMSO solvent. At the stage of making the standard solution, there was no color change after the addition of the reagent and in the determination of the anticholesterol potency the extract could not be combined with the Leiberman-Burchard reagent. The third preparation used 96% ethanol as solvent. In the manufacture of the standard solution, there was no color change after the addition of the reagent and in the determination of the anticholesterol potential there was also no color change after the addition of the reagent. It can be concluded that further preparation is necessary with solvents that can dissolve cholesterol and react when the Leiberman-Burchard reaction is added.

Keywords : cholesterol, purple sweet potato leaf, spectrophotometry, leiberman-burchard