

ABSTRACT

Obesity and diabetes are the diseases that have been becoming a problem in almost all countries right now. Obesity is characterized by the accumulation and deposition of excess fat in adipose tissues. Adipose tissue regulates numerous physiological processes, and its dysfunction in obese humans is associated with disrupted metabolic homeostasis, insulin resistance, and type 2 diabetes mellitus. This condition needs the attention both in preventing and treating these diseases. For a long time, Indonesian people have been using medicinal plant which is known as game to maintain health and treat various diseases. As it has been reported, the plant is a tremendous source of biologically active compounds that have been used as a drug until right now. Some of the Indonesian jamu has a potential to be a source of a new candidate anti-obesity and anti-diabetic. Therefore, here we are, doing the research in exploring anti-obesity and antidiabetic potential of the Indonesian game components. Chemical components of the samples were determined by using gas chromatography mass spectrometry (GCMS). Evaluation of the 3T3-L1 adipocytes is in progress. Due to the obesity and diabetes condition has correlation with the inflammatory activity, we also performed the evaluation of the anti-inflammatory activity of our samples by using anti-denaturation activity. Some of antidenaturation activities of plant material have been obtained.

Keyword: antiobesity, antidiabetic, jamu, 3T3-L1 adipocytes