ABSTRACT

Mango (Mangifera indica L.), belonging to the Mangifera genus, is an annual fruit which grows in tropical and subtropical regions and is traditionally used by the people worldwide. According to the Food and Agriculture Organization of the United Nations, the yield of mango (Mangifera indica L.) was about 25 million metric tons in 2011. Obviously, the requirement of mango is large in the world; on the other hand, there is a serious issue which bring about huge litter such as peel and seed is going to influence the environment. Various studies indicated that mango extracts has antidiarrhoeal (Rajan et al., 2012) anti-proliferative (Abu Bakar et al., 2010; Luo et al., 2014), antimicrobial (Abdalla et al., 2007; Kaur et al., 2010; Khammuang and Sarnthima, 2011), and hypolipidemic (Anila and Vijayalakshmi, 2003; Akila and Devaraj, 2008; Gorinstein et al., 2011), etc. In addition, mango kernels are rich sources of gallic acid, ellagic acid, ferulic acid, cinnamic acids, tanins, vanillin, coumarin, and mangiferrin, all having potential to act as a source of natural antioxidants (Abdalla et al., 2007 and Soong and Barlow, 2006).

Coronary heart disease and peripheral artery disease, among other cardiovascular diseases (CVD) associated with high calories and fat intake, are leading causes of death globally (Yu et al., 2013). Primary treatment interventions such as dietary and use of bioactive substances, aimed at reducing fat ingestion as well as serum low-density lipoprotein cholesterol (LDL-C) levels, have been proven to lower the triggering factors for CVD (Rony et al., 2014). The use of many chemical drugs as well as natural bioactive substances (Ban et al., 2012) is characterized by high efficacy and lipid-lowering rate (Ban et al., 2012). However, natural bioactive substances are advantaged by their potential minimal adverse effects and multiple target approach with less drug dependence, in the management of several chronic diseases including hyperlipidemia (Feng et al., 2011).

Keywords: Hypolipidemic effect, mango seed, in vivo

REFERENCES

In this study, Taiwan mango: Endemic mango seed kernel also has some bioactivities through the biochemical test. The result show that Em ethanol extracts has good effect to prevent the produce of high cholesterol. Therefore, Taiwan mango is also potential even promote Taiwan mango medicinal value in the word. And these bioactive components will be apply to the pharmaceutical and functional food field.