ABSTRACT

The Activity of Guava Juice (*Psidium guajava* L.) on Increasing Thrombocyte Levels in Blood and Reducing Vascular Permeability on Mice

Dengue hemorrhagic fever (DHF) is characterized by two main clinical manifestation which are decreased in blood platelet count (thrombocytopenia) and increased vascular permeability which causes leakage of plasma and the resulting shock. Guava (*Psidium guajava* L.) is believed be able to increase levels of thrombocyte in blood. In this studied, we used three cultivar of *Psidium guajava* L. such as red, white, and yellow. The dose of guava juice were 46.75 mg/20 g BW of red cultivar, 33.14 mg/20 g BW of white cultivar, and 68.74 mg/20 g BW of yellow cultivar.

The activity of guava juice (*Psidium guajava* L.) on increasing thrombocyte levels in blood was studied using indirect method (Fonio). Mice was given the guava juice daily in seven days. On days 0,3,5, and 7 blood smears were made to know the growth of thrombocyte. The result showed that red and white guava juices had activity on increasing levels of thrombocyte in blood, in reverse to yellow guava juice that had no activity to raise levels of thrombocyte in blood. In other case, the activity of guava juice on reducing vascular permeability was studied using acetic acid-induced vascular permeability test. And the result showed that red, white, and yellow guavas had no activity on reducing vascular permeability.

Keyword : *Psidium guajava* L, Dengue, Thrombocyte, Permeability vascular