ABSTRACT

Diospyros philippinensis also known as *mabolo,* is a plant that has been used in the folk medicine to treat cough and bleeding wounds. However, there is no scientific basis or report in the modern literature regarding its effectiveness as an analgesic agent. The objective of this study was to evaluate the analgesic property of hexane extract of *mabolo* using tail flick test and acetic acid writhing method. To determine the effect, three concentrations (50mg/kg, 100 mg/kg and 200 mg/kg) of the crude hexane extract of *Diospyros philippinensis* were investigated using these two laboratory tests. In tail flick test, results of the study showed a significant dose-dependent increase in reaction time from 37.67 s to 87.33 s, generally considered an important parameter of central analgesic property. Among the three concentrations, 200mg/kg exhibited the most analgesic potential which is comparable to Indomethacin (positive control). Similarly, in acetic acid-induced writhing test, the results also demonstrated a dose- dependent response in mice in which the concentration of 200 mg/kg also caused a significant inhibition (P<0. 01) of the abdominal constriction response when compared with the vehicle control. Its maximum analgesic effect was calculated to be 54.44 % which is not significantly different with the analgesic action of the reference drug (58.62%). These suggest that such concentration of *mabolo* extract is as effective as the commercial dosage of Indomethacin and also supports the use of *Diospyros philippinensis* as an analgesic drug in the folk medicine.