

OR-63**The *In-vivo* Study of Anti-asthmatic Effect of Partially Purified Extracts From The Leaves of *Labisia Pumila***

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Labisia pumila popularly known as Kacip Fatimah is a sub herbaceous plant which belonging to the Myrsinaceae family. It has been used in folk medicine to treat dysenteries and inflammatory disorders, such as rheumatism. Our previous study showed that crude dichloromethane extract exhibited a very strong anti-asthmatic and mast-cell stabilizing activity. In this present study, partially purified fractions A-E, of dichloromethane (DELP) crude extract obtained by column chromatography techniques were studied for their anti-asthmatic effect. 1% histamine, serotonin and bradykinin (0.1ml/rat) was dissolved with 0.9% (w/v) saline and subcutaneously injected to induce edema formation. 2mg of arachidonic acid was dissolved in 20 μ l of acetone and topically applied to mouse ear to induce ear edema. Also, 1% histamine and acetylcholine was dissolved in saline and was used to induce bronchoconstriction in guinea pigs. Oral treatment of partially purified fractions A-E (100mg/kg), and indomethacin (10mg/kg) inhibited significantly ($p < 0.001$) the formation of the histamine, serotonin and bradykinin-induced paw edema measured in the fifth hour. The highest inhibition was observed in fraction E which was 5.07% 5.63% for histamine, 5.65% for serotonin, 9.59% for bradykinin and 43% for arachidonic acid ear edema. Fraction A showed 55% and 48.17% respectively for inhibition of histamine and acetylcholine-induced bronchoconstriction after 24 hrs treatment and 68% and 51.21% protection after 14 days treatment. Phytochemical screening revealed the presence of flavonoids, steroids, saponins, alkaloids and tannins. The present study confirmed that the extracts exhibited anti-asthmatic activity by its anti-inflammatory and bronchodilatory action.

Keywords: Anti-asthma, paw edema, bronchospasm, *Labisia pumila*, mast-cell stabilization.