



Inhibitory Potential of Aqueous Leaves Extract of *Mesua Ferrea* and *Mimusops Elengi* on Antigen Specific Immune Response using Human Whole Blood

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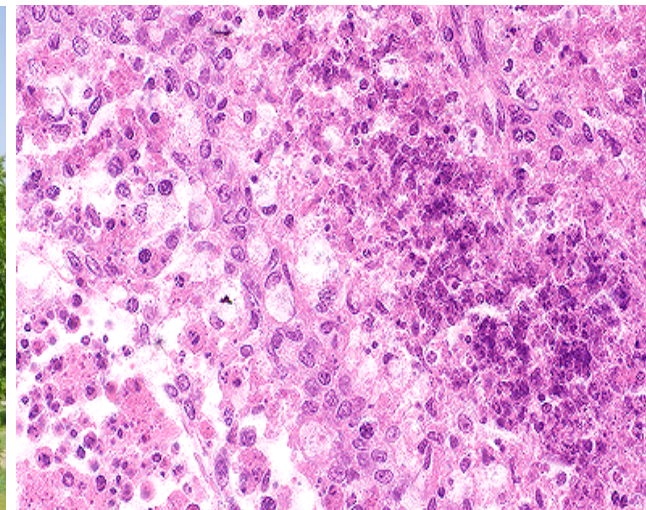
ABSTRACT: The objective of this study is to examine the effect of variable doses of aqueous leaves extract of *Mesua ferrea* and *Mimusops elengi* (0.5 – 10 mg/ml, 50 μ l), medicinal plant on human lysed whole blood (cultured for 48 h) in order to determine the antigen (IBD, infectious bursal disease; virus derived from chicken) specific immune response including CD14 monocyte surface marker which is determined through flow cytometry. The results showed that *Mesua ferrea* and *Mimusops elengi* (10 mg/ml, 50 μ l) showed dose dependent decline in antigen specific immune response including CD14 monocyte surface marker as compared to IBD virus and control. IBD used as standard for these studies and the results showed that there is significant enhancement in antigen specific immune response and CD14 monocyte surface marker as compared to control. Moreover, the outcomes of the work provide a platform on the way to discover novel immunosuppressive as well as anti-viral agents against IBD virus from plant origin.



Mesua ferrea



Mimusops elengi



Lymphoid necrosis in the bursa of chicken infected with infectious bursal disease (IBD)