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IN VITRO TIME DEPENDENT INHIBITION OF LEISHMANIAL PROMASTIGOTE REPLICATION FOLLOWING EXTRACTS FROM PLANTS ORIGIN

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ABSTRACT : Observations of different extracts derived from plants of *Eclipta alba* Hassk, *Aloe barbadensis* and *Piper longum* L revealed different pattern of leishmanicidal activities. Screening was done in late stationary phase promastigote culture of *L. donovani* (a causative protozoan parasite of Reticulo-endothelial system of human) by observing per cent inhibition through microscopical counting after 24 hours of inoculation with different concentrations (0.25mg/ml & 0.5%mg/ml) plant origin. Propidium iodide (PI) was used to measure the effect of these plant extracts on the degree of damage to the parasite cell membrane by flow-cytometry. The present study showed that crude soluble preparation of *Eclipta alba*, *Aloe vera* and *Piper longum*, recorded 96.7%, 87.3% and 83.3% inhibition rate of Leishmanial promastigote in 0.5mg/ml concentration at 24th h of inoculation.

Key Words : Leishmanicidal herbs, *Eclipta alba*, *Aloe vera*, *Piper longum*, *L. donovani*.