

ABSTRACT

Tumor inhibition efficacy of two medicinal plants which were derived from the extracts of Neem tree (*Azadirachta indica*) leaves and Devil's tree (*Alstonia scholaris*) bark was investigated on Benzene initiated, Chloroform and Cyclohexanone promoted skin tumor development in 30 day old male albino mice. Eight treatments were utilized, including the negative normal group where no chemicals or extracts were applied to the mice skin and positive control group where the initiator and promoters were applied at the maximum tolerated dose of the mice using the brushing method. After twenty weeks of experimentation the mice were sacrificed and the desired portion of the dorsal skin was collected. The collected skin was subjected to histopathological analysis based on set parameters for the incidence of tumor formation. Significant difference on the incidence of skin tumor treated with various concentrations of Neem tree leaves and Devil's tree bark extracts were observed. Among the two plant extracts Neem tree leaves exhibited the most inhibition as confirmed by histopathological analysis and Kruskal - Wallis H Test statistical tool method. The factor that is responsible for the inhibition of tumor growth is that medicinal plants have a characteristic of containing chemical components known to have an anti-tumor potential.