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RESEARCH ARTICLE

# *In vitro* effects of Indian ayurvedic medicinal preparation against UV B induced cytotoxicity

ANUPSINGH THAKUR AND SONU AMBWANI

## ABSTRACT

The object of the present study was to investigate the effect(s) of UV-B irradiation on chicken splenocyte culture and the ameliorating effect of Indian Ayurvedic medicinal preparation. The medicinal preparation *i.e.* aqueous extracts from *Andrographis pnaiculata* (Acanthaceae) and hydromethanolic extract of *Acacia catechu* (Fabaceae) namely ANDRO and ACQ, were used against UV B rays induced cytotoxicity. Isolated lymphocytes were subjected to UV-B irradiation and in combination of medicinal preparations *in vitro* for 0, 250, 500, 1250, 2500 and 3750 Joules/m<sup>2</sup> which correspond to the irradiation time of 0, 1, 2, 5, 10 and 15 minutes. 3-[4,5-dimethylthiazol-2yl]-2,5-diphenyltetrazolium bromide [MTT] assay performed for viability of lymphocytes in both treatments. Result show that the significant reduction in cell viability with increase in exposure of UV B rays. While the treatment of medicinal plants *i.e.* the dose of 0.3 mg/ml of both ANDRO and ACQ significantly reduces the per cent reduction in cell viability due to exposure of UV B rays.

**Key words :** Ultraviolet B irradiation, Viability

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MEMBERS OF THE RESEARCH FORUM

**Address for correspondence :**

**ANUPSINGH THAKUR**, Department of Molecular Biology and Genetic Engineering, College of Basic Sciences and Humanities, G.B. Pant University of Agriculture and Technology, PANTNAGAR (UTTARAKHAND) INDIA

**Coopted authors :**

**SONU AMBWANI**, Department of Molecular Biology and Genetic Engineering, College of Basic Sciences and Humanities, G.B. Pant University of Agriculture and Technology, PANTNAGAR (UTTARAKHAND) INDIA