

Ultra Violet –B Induced DNA Damage in Human Leucocyte Cells

Abhay Singh Yadav and Manoj Kumar Sharma

*Human Genetics Unit, Department of Zoology, Kurukshetra University,
Kurukshetra 136 119, Haryana, India
Telephone: +91-9416173289; E-mail: abyzkuk@gmail.com*

KEYWORDS UV-B; comet assay; leucocytes; DNA damage; single cell gel electrophoresis

ABSTRACT The Single Cell Gel Electrophoresis (SCGE) Assay also known as Comet Assay is a rapid, simple and visual technique for assessing DNA damage in individual cells. Effect of UV-B was studied by irradiating human leucocytes. Irradiation of leucocyte increases the DNA instability, which can be assessed by Single Cell Gel Electrophoresis Assay. The blood samples were exposed to UV-B radiation for various time period and a correlation was found out between length of the comet tail and time period of exposure to UV radiation. The UV-B irradiation showed clear-cut dose effect relationship. It was observed that with the increase in time of exposure to radiation, the mean tail length also increased.