

Plants face risk of sunburns

According to scientists from Switzerland and Germany, a thinning ozone layer could inflict lasting genetic damage on some plant species. Ultraviolet (UV) radiation, especially UV-B with wavelengths between 280 and 320 nm, has long been recognized as a hazard to human health. It knocks electrons off the DNA molecules in cells, setting off a variety of changes that could lead to cancer.

During trials, plants were exposed to UV-B radiation and as expected, this light bleached the plant's green photosynthesis pigment, chlorophyll, and stunted their growth. Researchers at the Friedrich Miescher-Institut, Switzerland, inserted a so-called "reporter" gene into tobacco plants and *Arabidopsis thaliana*. This caused plant cells to stain blue wherever their DNA suffered changes after being exposed to radiation from special lamps. In a small number of cases, the team also found staining in the offspring of exposed plants which led to the conclusion that the parent's germ (reproductive) cells were also damaged. (Website: http://www.news.bbc.co.uk/hi/english/sci/tech/newsid_820000/820670.shtml)