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In vivo radio protective activity of *Syzygium cumini* (L.) (Duhai) extract**Esquivel Macrence M, Jacinto Marc Adrienne C, Santos Jesy Allister M and Avilla Ruel A**
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The continuous depletion of the Earth's ozone layer by anthropogenic activities has fueled concern about the impact of increasing solar ultraviolet-A radiation (UV-A) on humans. The DNA is one of the key targets for UV-induced damage on humans. The DNA-damage has a key role; it is important for carcinogenesis because of the possibility of change in genetic content. Hence, preventing the ensuing process of carcinogenesis or other disease stages is important. Phytochemicals containing medicinal plant extracts that are known to absorb radiation have been found to have radio protective effects, thus reducing the effects of UV radiation on human skin. The plant *Syzygium cumini* (L.) radio protective effect against UV-A radiation on dermal cells was investigated in vivo to obtain a potential value in providing a possible source of a radio protective substance which is useful to people with photodermatoses and prevention of other skin diseases related to UV radiation. Different concentrations of *Syzygium cumini* (L.) crude extract were administered to three different groups of mice for 24 consecutive days and they were exposed to UV-A radiation (365 nm) for three hours. Their DNA from skin tissue was isolated and analyzed using agarose gel electrophoresis assay. Results showed that at any concentration, the extract administered was effective against UV-A radiation.

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