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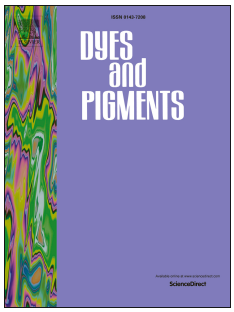

Photochemical formation of a fluorescent thymidine-pterin adduct in DNA

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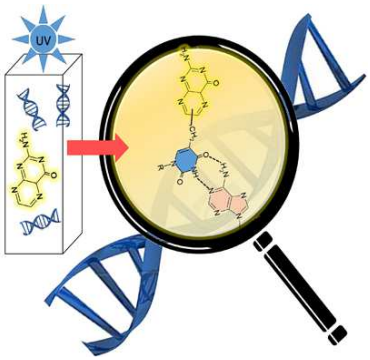

The photochemistry of the DNA is an issue of paramount importance as it is part of the etiology of skin cancer development, being ultraviolet sunlight radiation the most relevant environmental carcinogen. Herein, we demonstrate the potential of pterin, an endogenous compound, to form covalent adduct under UVA irradiation with a short thymine oligomer as well as with the whole DNA polymer.