

Synthesis, antimalarial activity, and docking studies of monocarbonyl analogues of curcumin

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Abstract. The synthesis of five monocarbonyl analogues of curcumin is described. *In vitro* anti-malarial assay of the compounds was carried out and the effect of the substituents on the aryl ring has been described. The results show that all the five compounds exhibited some reasonable activity against the chloroquine-resistant plasmodium parasite. Molecular docking studies further confirmed the observed biological activity of the compounds.

Keywords: curcumin, monocarbonyl analogues, antimalarial activity, docking studies.

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