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Review on Synthesis of Chalcone and its Derivatives with their Biological Activities

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Abstract: In a new and efficient antimicrobial agents, substituted chalcones have been synthesized by condensing benzaldehyde derivatives with acetophenone derivati ves in dilute ethanolic sodium hydroxide solution at room temperature according to Claisen Schmidt condensation. Chalcones are a valuable molecule of medicinal importance due to presence of reactive keto ethylenic group – CO–CH=CH–, belonging to the flavonoid family. Chalcones are 1, 3-diphenyl-2-propene-1-one, in which two aromatic rings are linked by a three carbon α , β -unsaturated carbonyl system in chalcones are responsible for their biological activity. This review is focused about different methods of synthesis and versatile biological activity of chalcones including antimicrobial, anticancer, antioxidant, antimalarial, antituberculosis etc.

Keywords: Chalcones, synthesis, Antibacterial activity, biological activity, Claisen-Schmidt reaction.

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