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Review on Synthetic Strategies for 1,2,4-Thiadiazines and its Biological Activity

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Abstract: The thiadiazines compound contains one sulphur and two nitrogen atoms at varied positions in six-membered rings. Thiadiazines possess an N-C-S linkage that is believed to be very useful in medicinal and pharmaceutical chemistry. Thiadiazine derivatives shows wide variety of medicinal activities like antibacterial, anti-inflammatory, fungicidal, anticancer, anti-tuberculosis, antiepileptic, antimalarial, antioxidant, antidiabetic. Based on position of nitrogen and sulphur thiadiazine are named as 1,2,3-thiadiazine, 1,2,4-thiadiazine, 1,2,5-thiadiazine, 1,2,6-thiadiazine, 1,3,4-thiadiazine and 1,3,5-thiadiazine. Sulphur containing drugs are known as sulpha drugs. This review aims to summarize recent synthetic strategies and biological activities of 1,2,4-thiadiazines derivatives.

Keywords: 1,2,4-thiadiazine, Antidiabetic, Anticancer, anti-tuberculosis





