SYNTHESIS OF SOME TRIAZINE DERIVATIVES AND THEIR BIOLOGICAL ACTIVITY

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Numerous asymmetrical triazine derivatives incorporating substituted heterocyclic moieties are well known biological agents such as antiinflammatory, antimalarial, antiviral as well as antimicrobial and pesticidal properties.

With a view for exploring new leads in medicinal chemistry we have synthesised a few benzimidazoles, benzylidenes, oxadiazoles, thiazoles and thiadiazoles of 5,6-diphenyl 1,2,4-triazine 3-thiol. The thiol was synthesised by condensing benzil and thiosemicarbazides. With aryl diamines it gave benzimidazoles through thicester, Hydrazide of thioester on reaction with aryl aldehydes yielded benzylidene derivatives. In presence of alkaline carbon disulphide, hydrazide was cyclised into corresponding oxadiazole. Further thiol when condensed with chloroacetylated heterocyclic amines formed the respective derivatives. All the compounds were studied for their biclogical activities namely, antimicrobial cholinesterase enzyme inhibitory, and C.N.S. activities.