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### THE USE OF UREA AND THIOUREA IN MANNICH-TYPE CONDENSATION REACTIONS

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## THE USE OF UREA AND THIOUREA IN MANNICH-TYPE CONDENSATION REACTIONS

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Urea, thiourea and some N-alkyl or N-aryl-(di)substituted ureas and thioureas were found to react as an amine component in Mannich-type condensation reactions with 5-substituted isatins or aryl-sulphonamides and formaldehyde.

Mono- or dialkylated products are formed easily, depending on the structure of the amine component and the reaction conditions.

The possibility of heterocyclization of the reaction products from arylsulphonamides was investigated too. The factors which influence the possibility and the developing of the condensation reaction are also discussed.