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O. ISOTHIOCYANATO CINNAMALDEHYDE - A USEFUL INTERMEDIATE FOR HETEROCYCLIC SYNTHESES

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O. ISOTHIOCYANATO CINNAMALDEHYDE - A USEFUL INTERMEDIATE FOR HETEROCYCLIC SYNTHESES

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Reaction of o.isothiocyanato cinnamaldehyde - (1), a scission product from quinoline and thiophosgene, with diethyl sodiomalonate gives 3-formylquinoline-2-thione (2). This compound has been used as an intermediate in the synthesis of thieno [2,3-b]quinolines, isothiazolo [5,4-b]quinoline and some 2,3-substituted quinolines. A review will be given of other di- and tri-cycles which may be obtained from the aldehyde (1) and thione (2).

CHO
$$\begin{array}{c}
\text{CHO} \\
\text{NCS}
\end{array}$$
(1)
$$\begin{array}{c}
\text{CHO} \\
\text{H}
\end{array}$$
(2)