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Cyclization reaction of *N*-allylbenzothioamide for direct construction of thiazole and thiazoline

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Abstract A facile catalyst-free intramolecular cyclization reaction of *N*-allylbenzothioamide was reported. The reactions with the substrates bearing electron-withdrawing groups afforded thiazoles as products, while thiazolines formed from the reactions with substrates containing electron-donating groups as well as aliphatic substrate. This reaction provides a new access to 2,5-disubstituted thiazoles and thiazolines directly from readily available *N*-allylbenzothioamide.

Keywords: Thiazole; thiazoline; cyclization; *N*-allylbenzothioamide; catalyst-free

Thiazoles and their derivatives represent one of the most important classes of biologically and pharmaceutical active compounds, and have been playing a pivotal role in modern medicinal chemistry. They also exist in numerous natural products and

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