

Nitrone Cycloaddition: An Entry to both cis- and trans-2,6-Disubstituted Piperidines

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ABSTRACT

The cycloadduct derived from the addn. reaction of 6-substituted 3,4,5,6-tetrahydropyridine 1-oxide is converted into both cis- and trans-2,6-disubstituted piperidines in a highly selective manner. Oxidative ring cleavage of the bicyclic compd. I gave the nitron II. Stereoselective redn. of II with Pt/hydrogen gave the cis-2,6-disubstituted piperidine III and trans-disubstituted piperidine in a 97:3 isomer ratio.

