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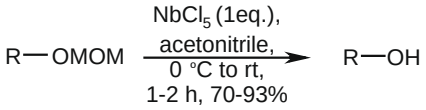
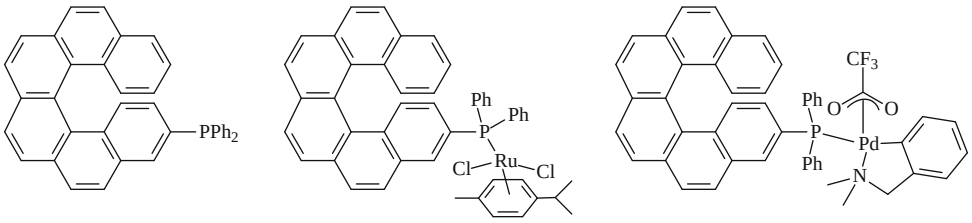
Contents

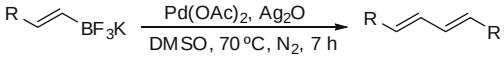
COMMUNICATIONS

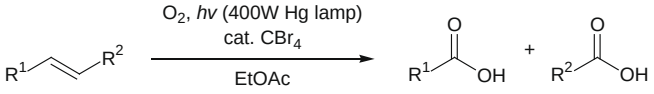


R = Ar, alkyl, allyl, benzyl, propargyl

16 examples

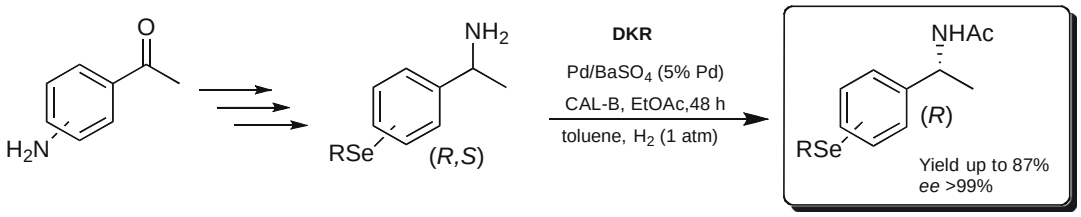


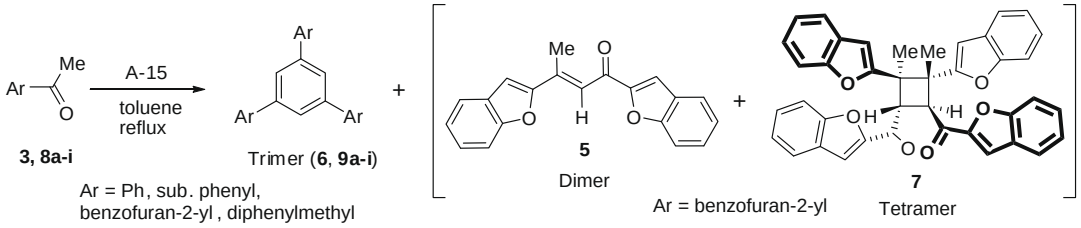


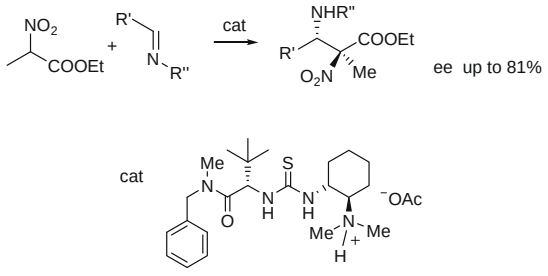


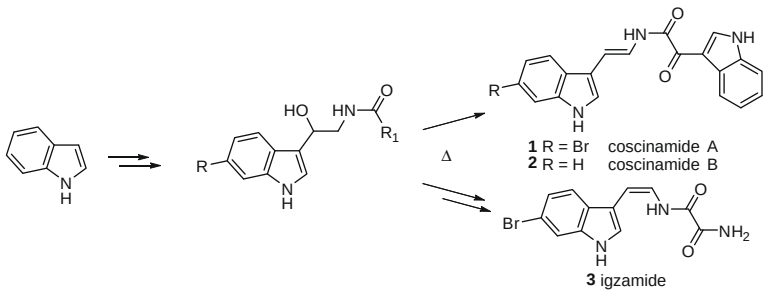
R^1 = aryl, alkyl
R^2 = H, alkyl, aryl

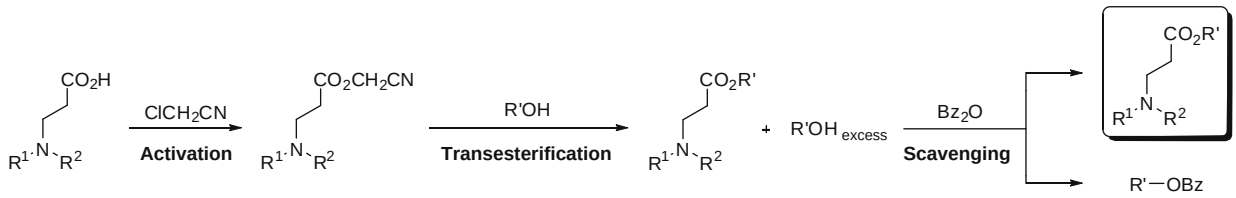
18-88%

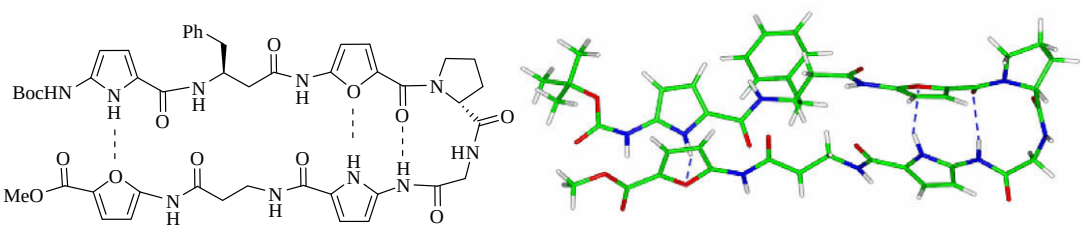


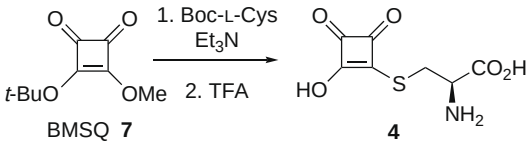


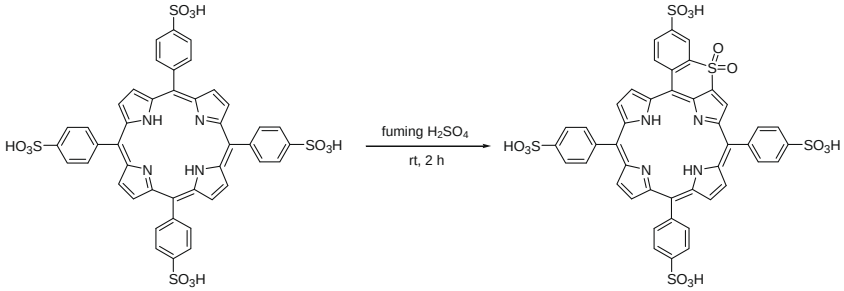


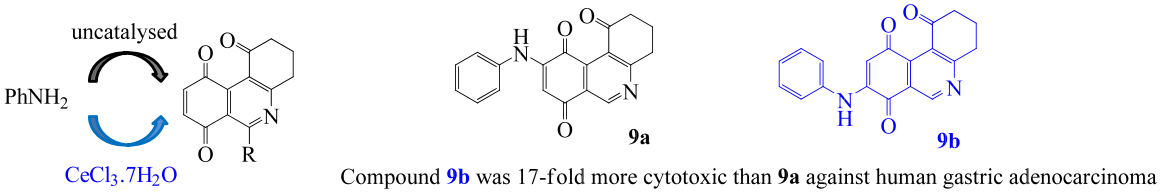


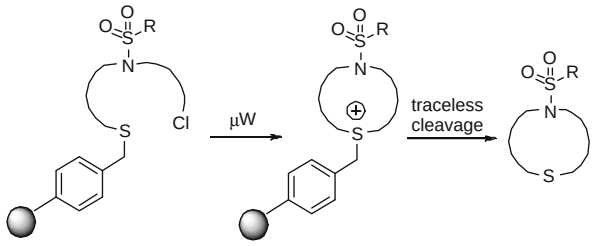


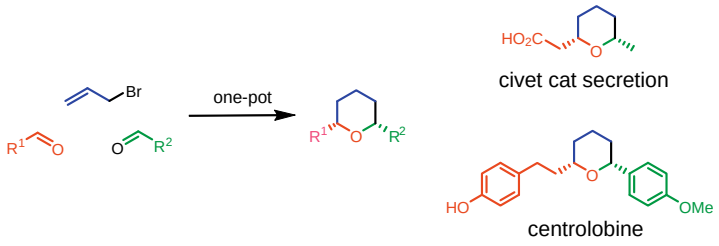




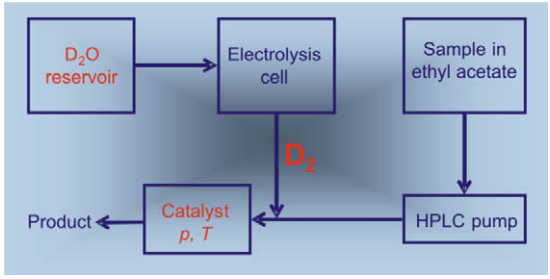




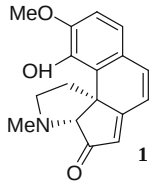




A one-pot strategy is devised and applied to the total syntheses of natural products with a THP-ring backbone. A special feature of this one-pot synthesis is the recyclability of the indium complex byproduct generated from the indium-mediated allylation reaction for concurrent catalysis in subsequent steps. Centrolobine and civet cat secretion are synthesized via this new method in overall yields of 58% and 23%, respectively.

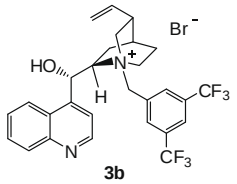


Continuous flow reactors offer a very efficient method for deuteration. This procedure simplifies deuterium labeling to a routine process.

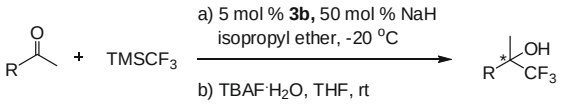


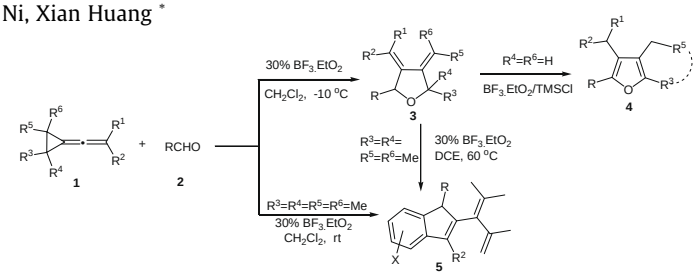
1

From the stems of *Sinomenium acutum*, sinoracutine (**1**) has been isolated, an alkaloid with a structurally novel skeletal framework, whose structure has been established by spectral and single crystal X-ray diffraction analysis. In vitro experiments show that sinoracutine increases cell viability against hydrogen peroxide-induced oxidative injury.

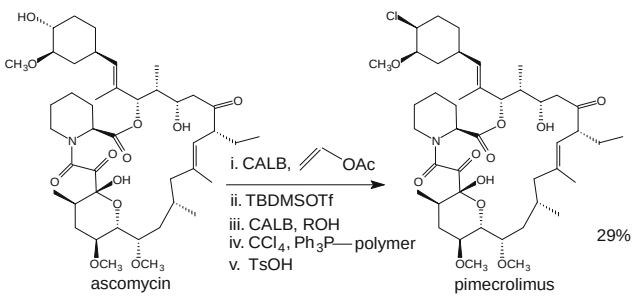


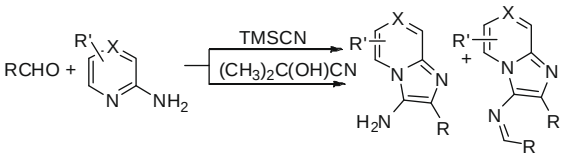
3b





A variety of polysubstituted tetrahydrofuran and indene derivatives were prepared in moderate to excellent yields via the cycloadditions of vinylidenecyclopropanes with common aldehydes in the presence of Lewis acid. The polysubstituted tetrahydrofuran **3** could undergo further transformations to the indene product **4** and furan derivatives **5**.





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*Corresponding author
Supplementary data available via ScienceDirect

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