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Tetrahedron Letters

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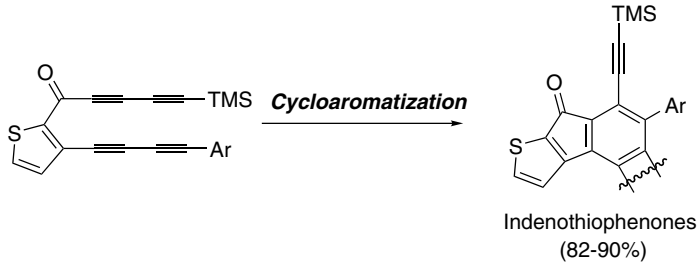
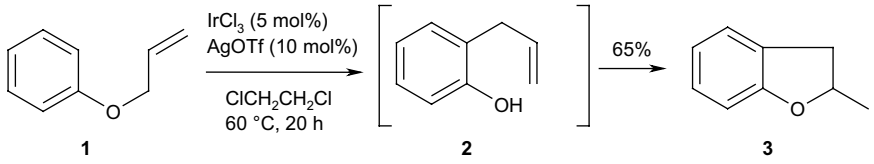
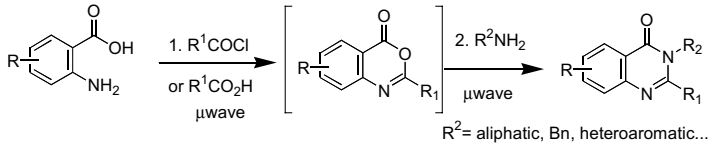
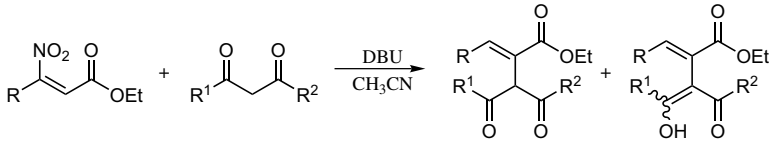
Contents

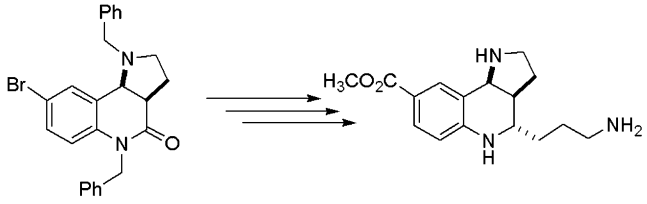
COMMUNICATIONS



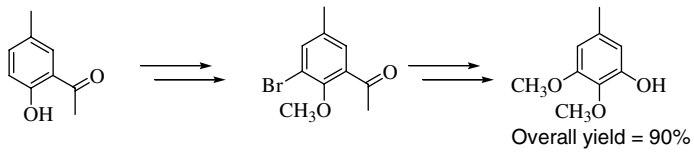


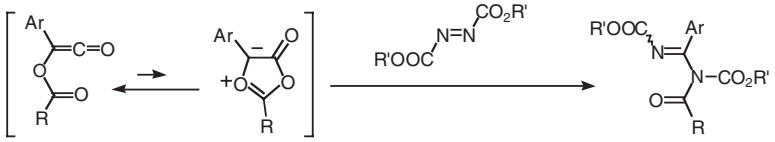


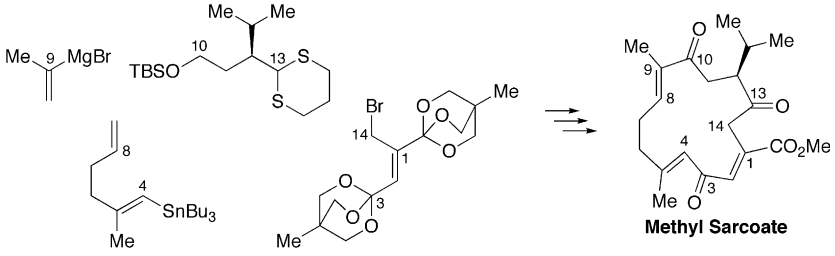


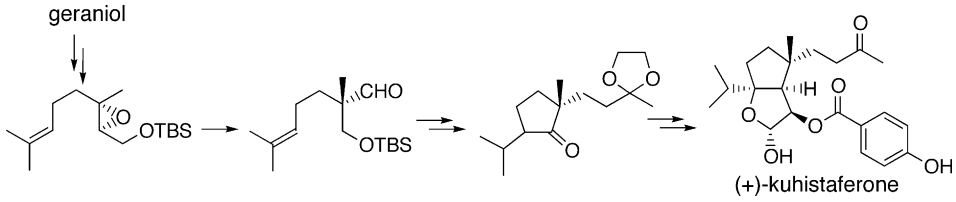


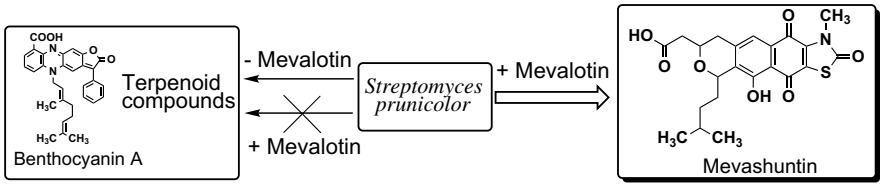
The formal total synthesis of the *Martinella* alkaloids has been accomplished through the elaboration of a pyrrolo[3,2-*c*]quinol-2-one via the addition of a highly functionalized copper acetylide.

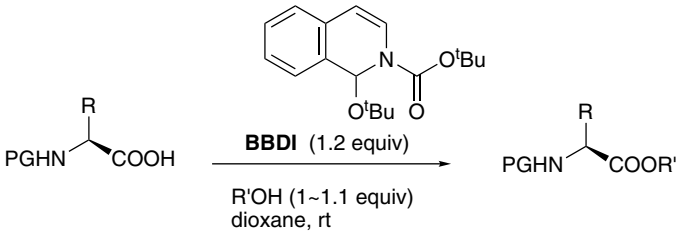


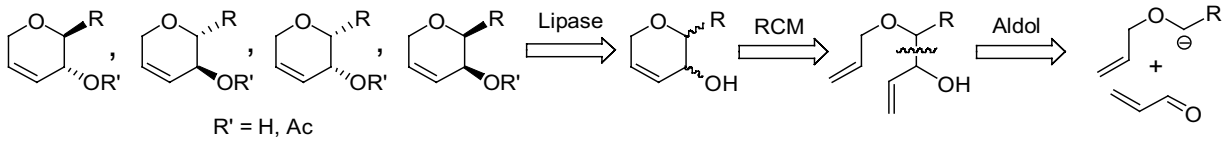


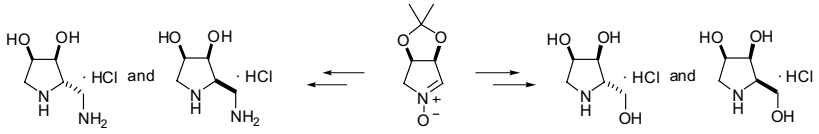




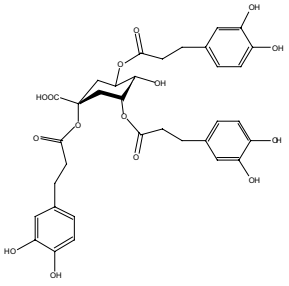




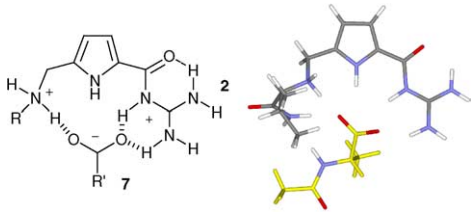




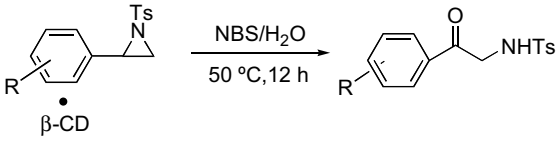
A practical synthesis of 2-aminomethyl- and 2-hydroxymethyl-3,4-dihydroxypyrrolidines via stereocontrolled addition of TMSCN and $LiCH_2OMOM$ to chiral 3,4 dihydro-2*H*-pyrroline *N*-oxides is reported.

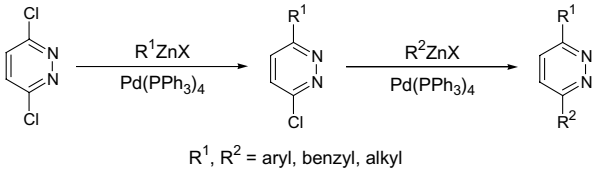


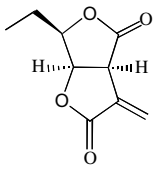
A phytochemical investigation of *Podospermum laciniatum* (L.) DC. (Asteraceae) yielded the new quinic acid derivative podospermic acid (1,3,5-tridihydrocaffeoylquinic acid), which was named after the genus it was isolated from. The structure was established by HR mass spectrometry and extensive 1D and 2D NMR spectroscopy. Podospermic acid is the first naturally occurring dihydrocaffeoylquinic acid derivative. The chemosystematic impact and the radical scavenging activity of the new compound are discussed briefly.



The synthesis and binding properties of a new guanidiniocarbonyl pyrrole dication **2** are reported, which efficiently binds alanine carboxylate **7** in water with $\log K_{ass} = 3.9$. However, the experimental conditions for determining the binding constant significantly influence both complex stability and stoichiometry.

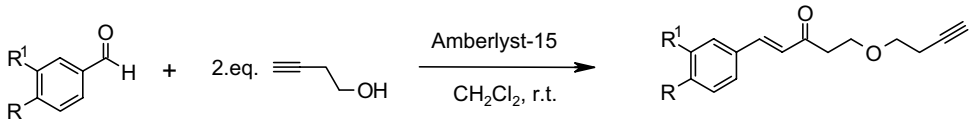


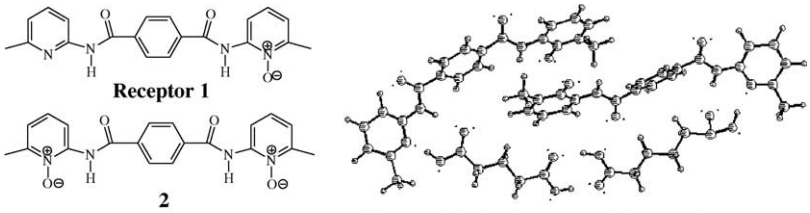




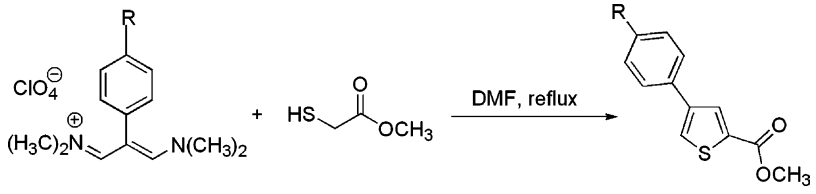
Xylobovide

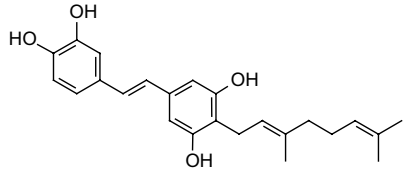
The first total synthesis by an intramolecular radical cyclisation protocol on a carbohydrate derived 5-hexynyl system, and determination of the absolute stereochemistry of xylobovide are reported.

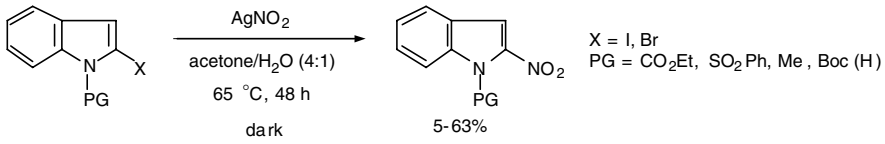


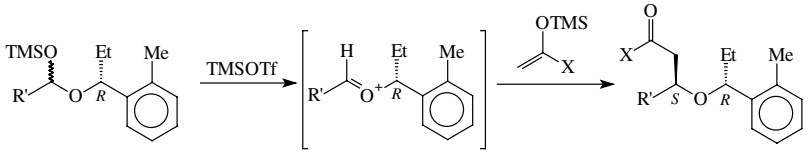


Energy minimized structure of the complex of receptor **1** with adipic acid

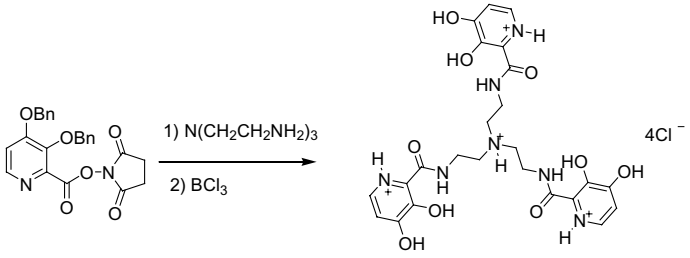


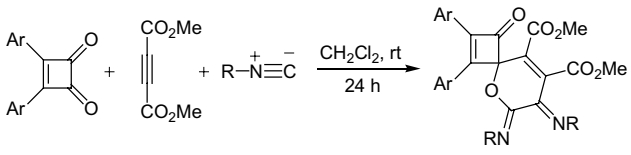




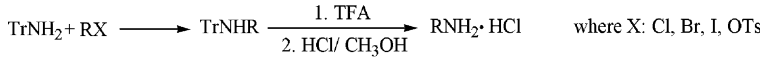


Acetate aldol reactions of chiral oxocarbenium ions have been investigated and give the corresponding products with high diastereoselectivity in a predictable manner.

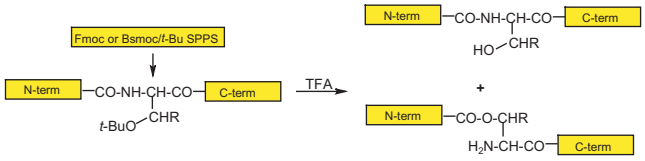


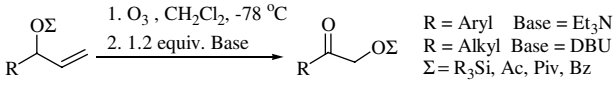


Isocyanides, dimethyl acetylenedicarboxylate, and cyclobutene-1,2-diones react in one-pot to afford novel spirocyclic compounds with double insertion of the isocyanide.

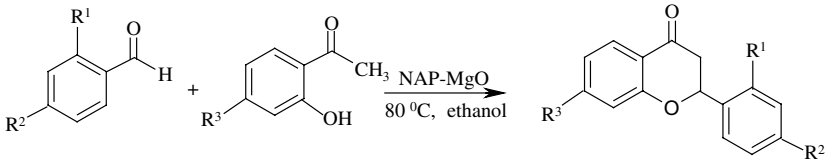


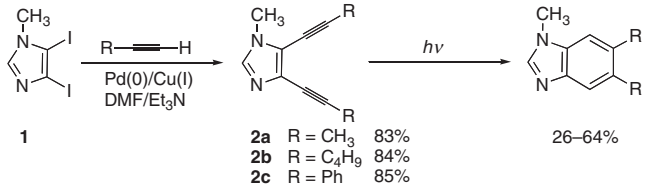
A convenient method for the preparation of primary amines from alkyl halides or alkyl tosylates by the use of tritylamine has been established. Primary amines were obtained in good yields by treating the *N*-tritylamines with trifluoroacetic acid.

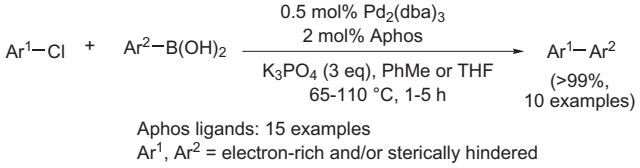




The ozonolysis of substituted-allyl silyl ethers or -allyl esters followed by treatment with bases gave the corresponding α-silyloxy ketones or α-acyloxy ketones in good yields. The reaction was proposed to proceed via a novel ene–diol rearrangement of the corresponding α-silyloxy aldehydes or α-acyloxy aldehydes intermediates.







OTHER CONTENTS

*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

COVER

The first asymmetric total synthesis of a marine natural product, methyl sarcoate, has been achieved featuring the asymmetric Michael addition, the dithiane coupling, the Kosugi-Migita-Stille coupling, and the ring-closing metathesis. *Tetrahedron Letters* **2005**, *46*, 1263–1267.

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