ELSEVIER

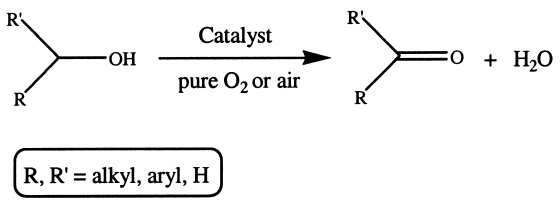
Tetrahedron

Tetrahedron Vol. 60, No. 13, 2004

# Contents

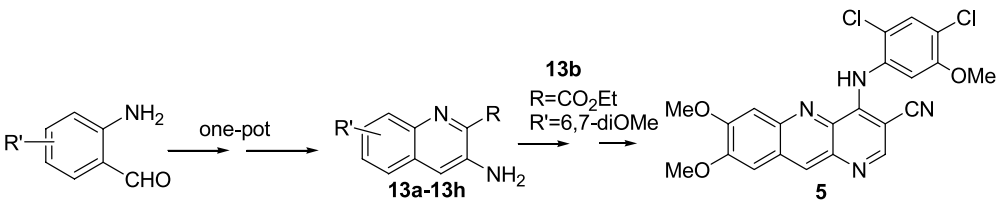
## REPORT



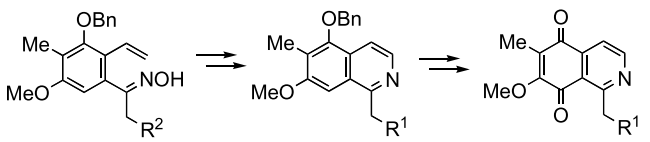


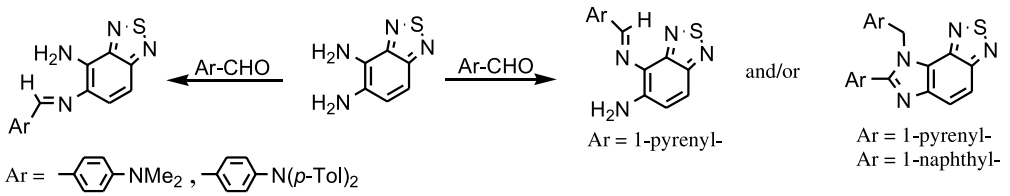

## ARTICLES



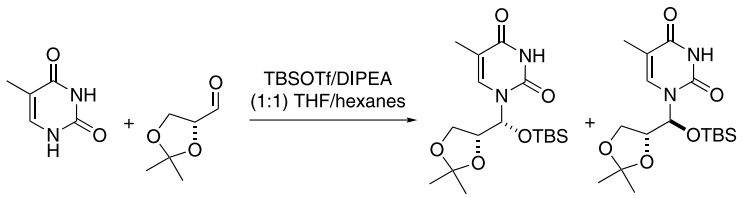




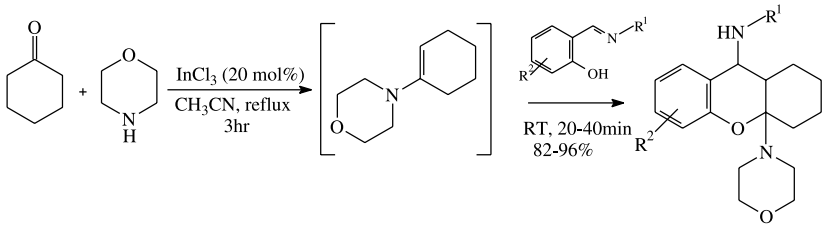







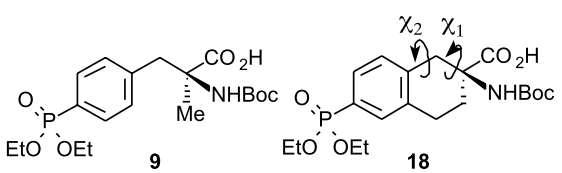



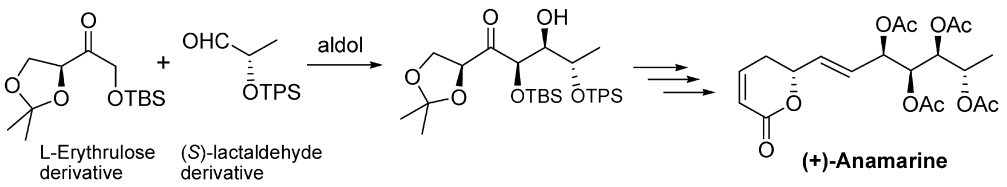



A simple, efficient, and novel method for the synthesis of hexahydroxanthene-9-*N*-arylamine derivatives through a one-pot reaction of cyclohexanone and morpholine with salicylaldehyde imines in the presence of indium(III) chloride as a catalyst is reported.

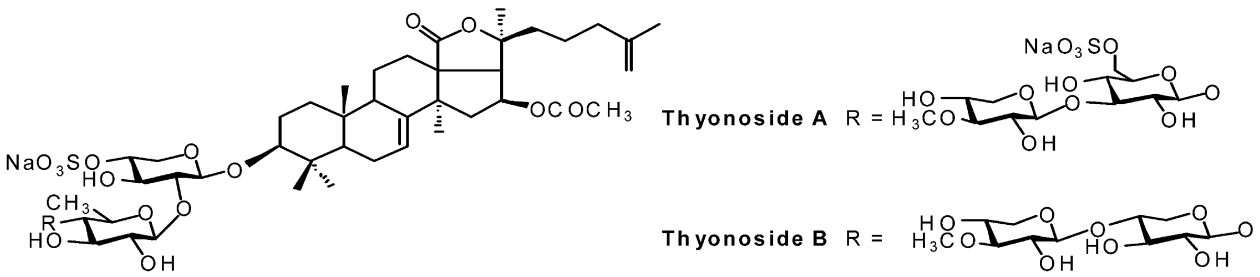




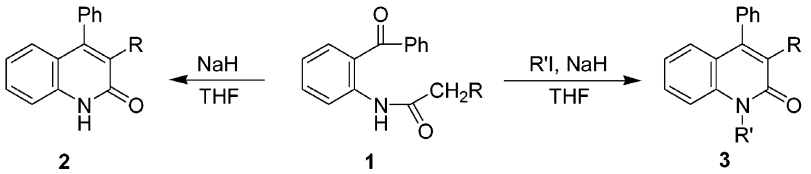



The naturally occurring, cytotoxic lactone (+)-anamarine has been synthesized in a completely stereoselective way. The aldol reaction of a suitably protected L-erythrulose derivative with a (*S*)-lactaldehyde derivative was the key step of the synthesis. An asymmetric allylation and a ring-closing metathesis were further relevant steps.



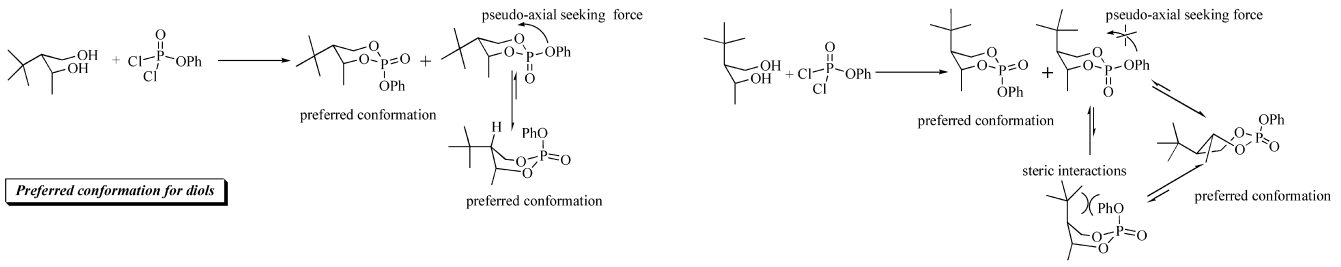


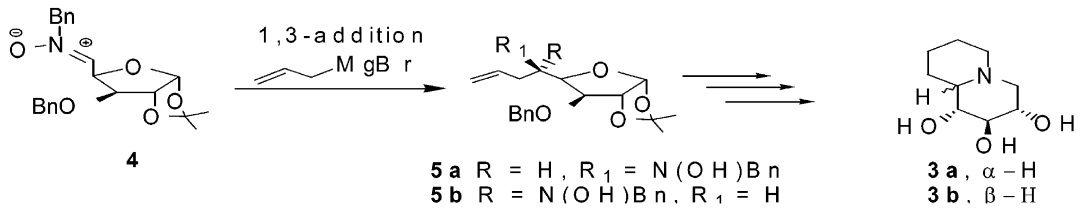


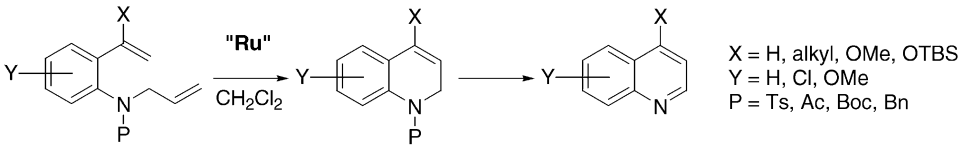

The reaction of **1** (R=H, $CH_3$, *n*-$C_5H_{11}$) with NaH gave **2** in 62–83% yields, and the reaction in the presence of R′I gave **3** (R′=Me, Et, *n*-Octyl) in 75–95% yields.







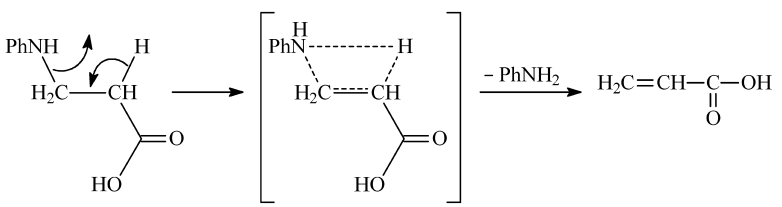


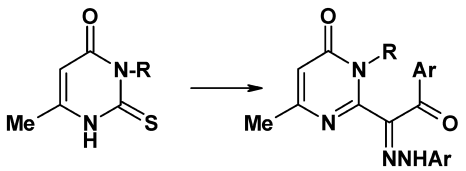



Metal ion binding with six-membered π-systems span a wide range and can vary greatly, the structural and electronic factors can make the binding energy anywhere between 15 and 60 kcal/mol in this series.

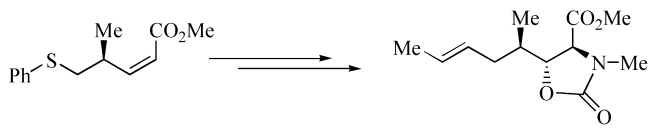





Thermal gas-phase elimination of 3-(*N*-phenylamino)propanoic acid together with four of its aryl analogues reveal the formation of acrylic acid in addition to aniline or substituted anilines. Theoretical study using an ab initio SCF method lend support to a reaction pathway involving a 4-membered cyclic transition state.

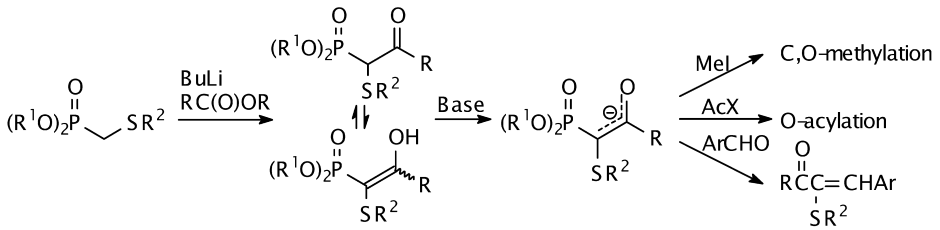




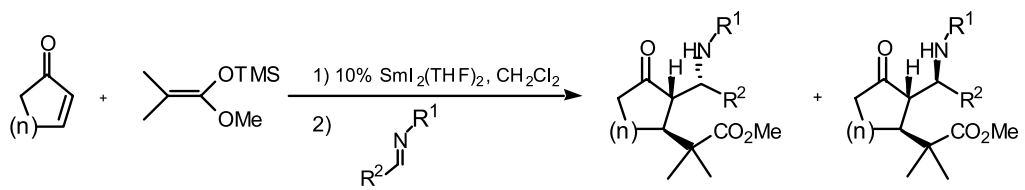




A stereoselective formal synthesis of MeBmt is disclosed.

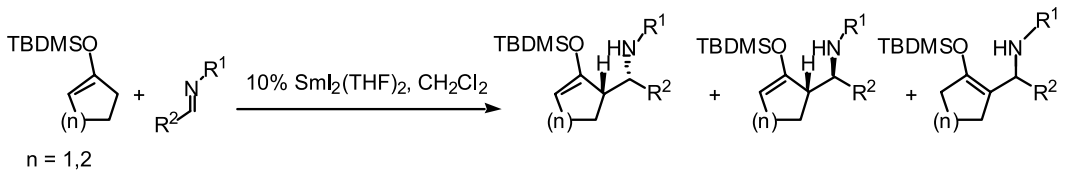




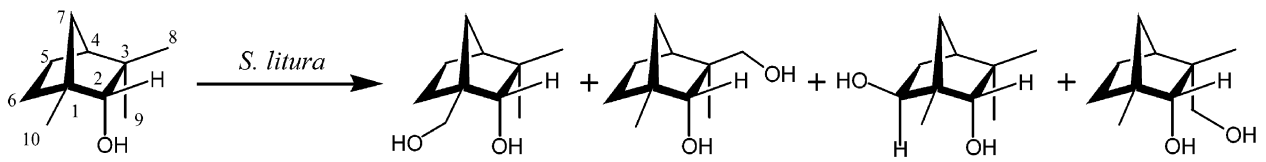



One-pot procedure

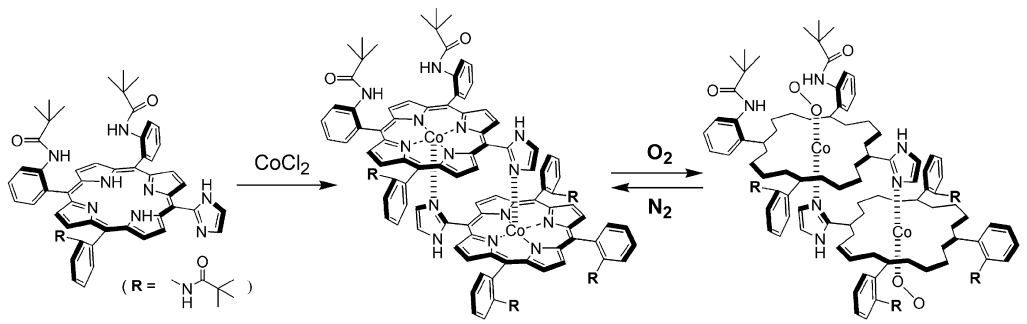




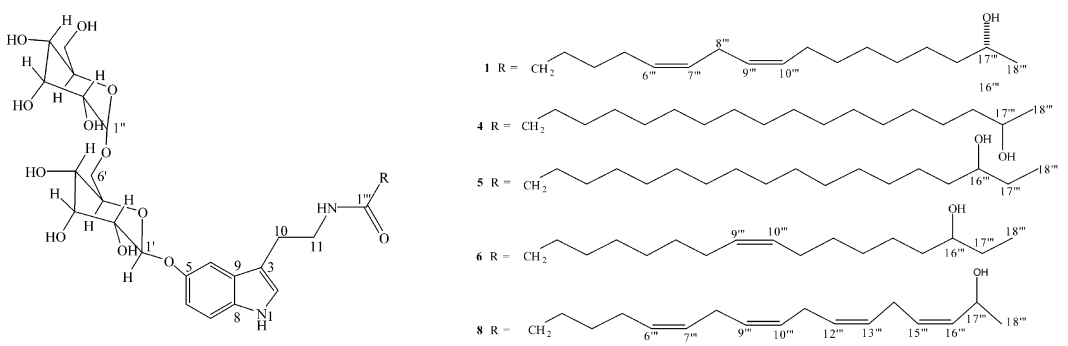




Biotransformation of (+)-(1*R*,2*S*)-fenchol in *Spodoptera litura* larvae has been investigated and isolated four metabolites (three new).







## OTHER CONTENTS



*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect



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