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Tetrahedron Letters

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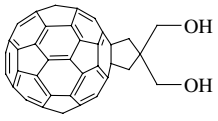
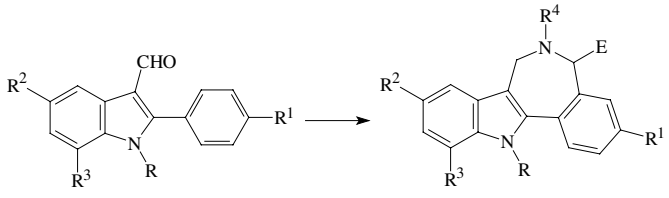
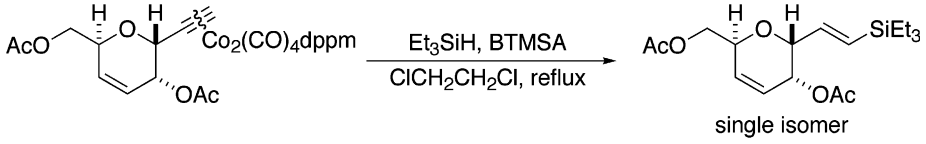
Contents

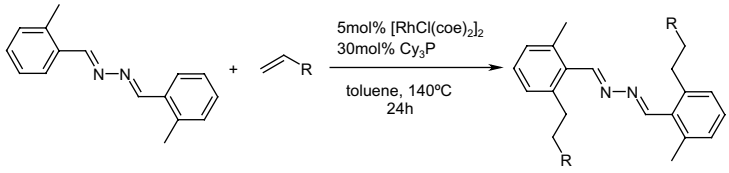
COMMUNICATIONS

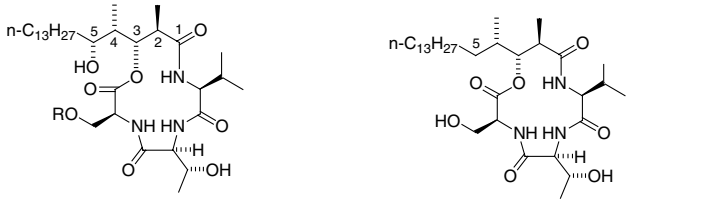




A new, general route to the benz[5,6]azepino[4,3-*b*]indole ring system has been developed via the 1,7-dipolar electrocyclisation reactions of azomethine ylides.

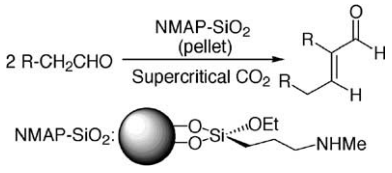


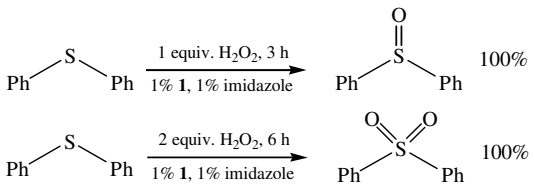


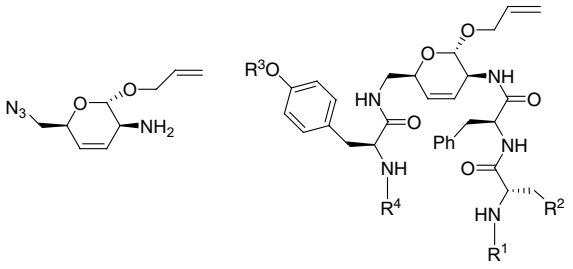


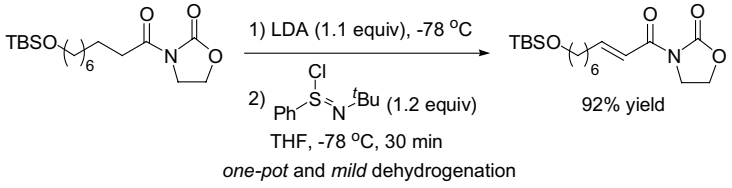
R = Ac: stevastelin B3 (proposed and confirmed)
R = H: stevastelin C3 (proposed, incorrect)

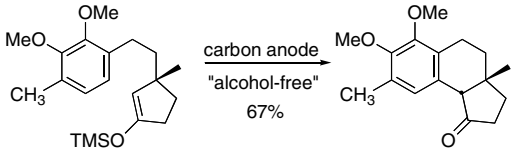
the revised structure of stevastelin C3



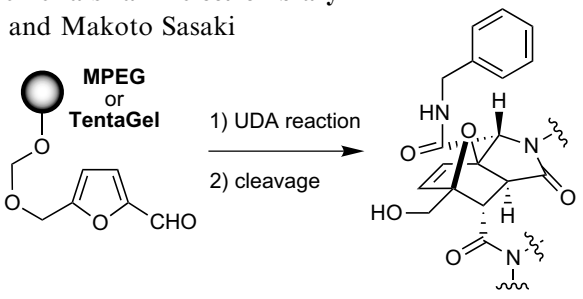




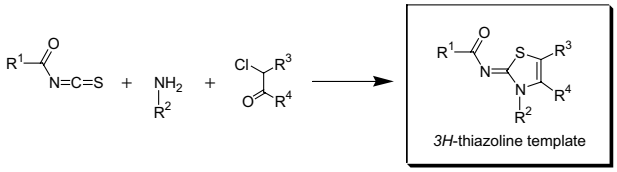


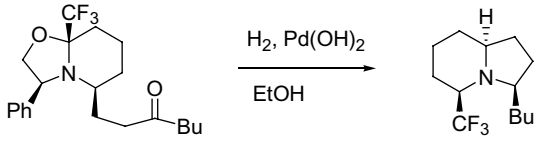


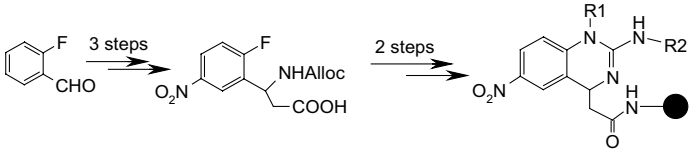
The tricyclic skeleton of the hamigerans has been prepared through an anodic coupling under alcohol-free conditions.

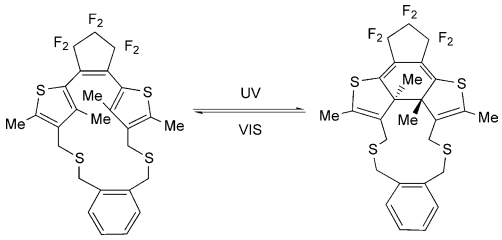


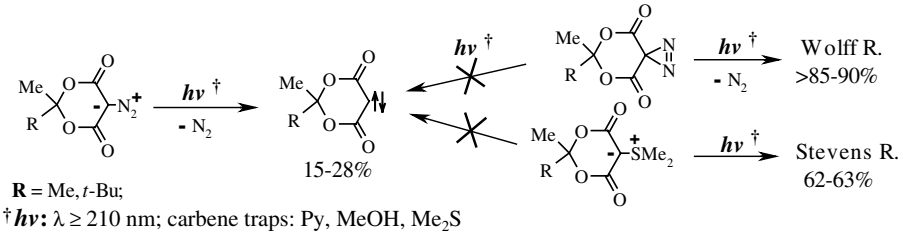
A hundred reactions were demonstrated on the soluble MPEG–O–CH_2-platform. The reaction can be also effected on insoluble TentaGel resin using the same linker.



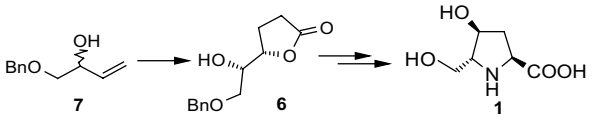




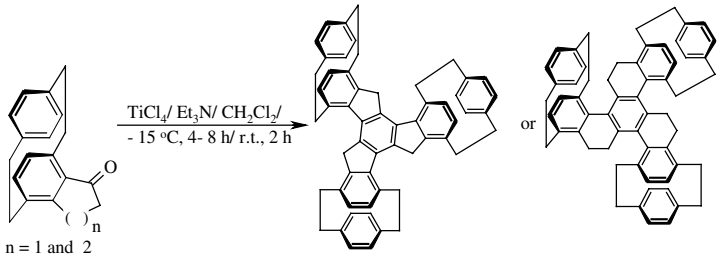


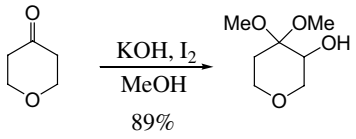


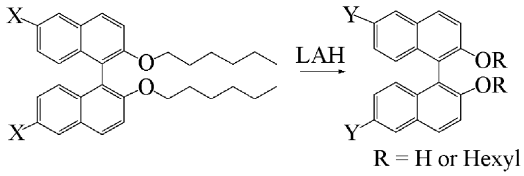
R = Me, *t*-Bu;
†***hv*:** λ ≥ 210 nm; carbene traps: Py, MeOH, Me_2S

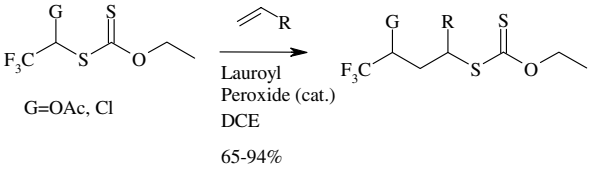


A short synthetic route to (−)-and (+)-bulgecinine, the amino acid moiety of the bulgecins was achieved from the readily available nonchiral pool starting material *cis*-2-butene-1,4-diol employing a Claisen orthoester rearrangement and Sharpless asymmetric dihydroxylation as the key steps.

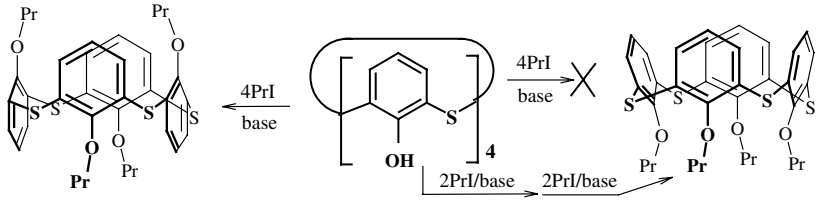




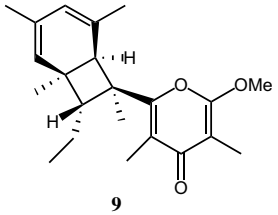




S-1-Acyloxy-2,2,2-trifluoroethyl and *S*-1-chloro-2,2,2-trifluoroethyl dithiocarbonates add efficiently to various functionalised olefins to give the corresponding adducts via a radical chain reaction initiated by a small amount of lauroyl peroxide.

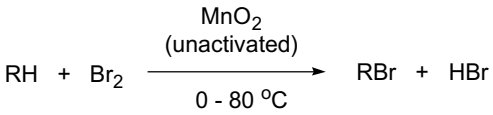


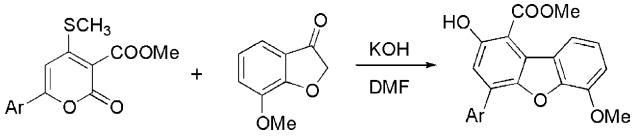
Cone conformers are accessible in very poor yields by the direct tetraalkylation of starting thiacalix[4]arenes. Surprisingly, the two-steps procedure: dialkylation/dialkylation leads to the *cone* conformation in high yields.



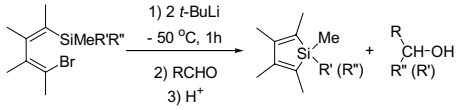
9

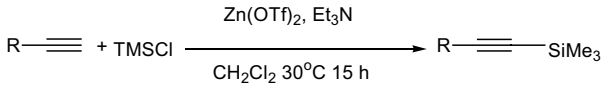
Two new γ-pyrone propionates (i.e., **9**, relative stereochemistry), characterised by a bicyclo [4.2.0] octane ring, have been isolated from the Indian sacoglossan *Placobranchus ocellatus*. A sunscreen protective role of compound **9** could be suggested by analogy with photodeoxytridachione previously found in the same mollusc.



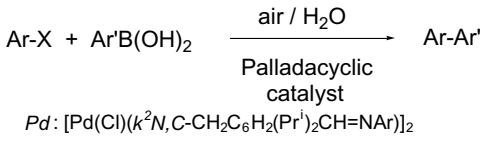


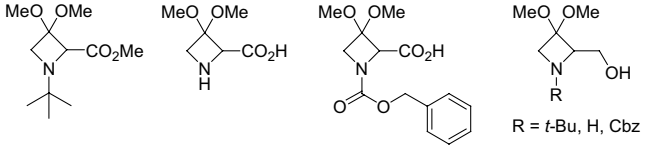
In this work, we report our results on the asymmetric reduction of prochiral aromatic and aliphatic ketones **3**, **5**–**8** catalyzed by the novel in situ generated oxazaborolidine **2** derived from (1*S*,2*S*,3*R*,4*R*)-3-amino-7,7-dimethoxybornan-2-ol (**1**) and $BH_3{\cdot}Me_2S$. This methodology was applied to the synthesis of the anti-depressant drug (*R*)-tomoxetine in three steps and 47% overall yield from 3-chloropropiophenone (**3h**).

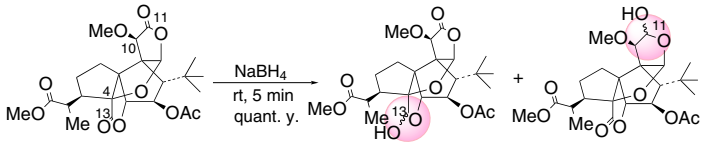




The direct silylation of terminal alkynes with chlorosilanes takes place in the presence of zinc triflates, which provides an efficient and inexpensive route to synthesize different silylalkynes in excellent yields.







OTHER CONTENTS

*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

COVER

The cover shows the structures of naturally occurring immunosuppressant, stevastelins B3 and C3. While total synthesis of stevastelin B3 fully confirmed its proposed structure, that of stevastelin C3 revealed the incorrectness of the proposed structure. The correct structure of stevastelin C3 was established by the total synthesis of the compound whose structure was presumed by spectral and degradative studies of the natural product to be 5-deoxy derivative of the proposed structure. *Tetrahedron Letters* **2005**, *46*, 389–392.

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