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Tetrahedron Letters

Tetrahedron Letters Vol. 45, No. 22, 2004

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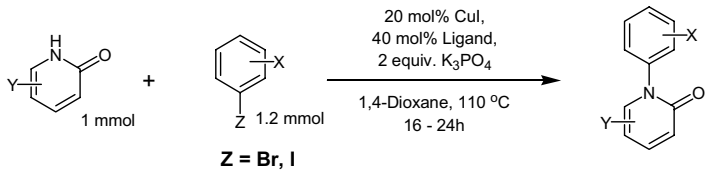
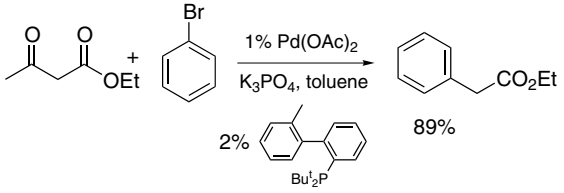
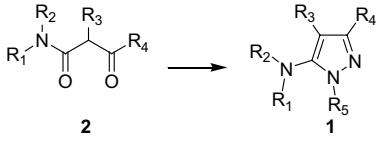
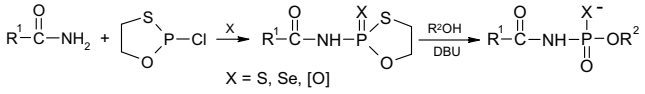


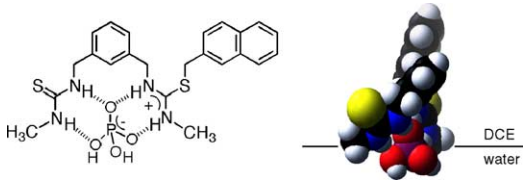


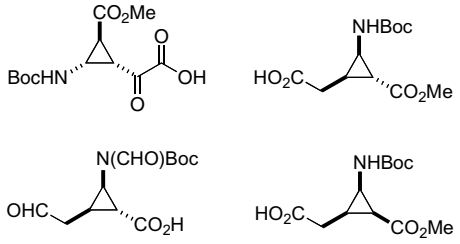
The synthesis of a number of 2-arylacetic acid esters using a palladium-catalysed enolate arylation reaction is described.

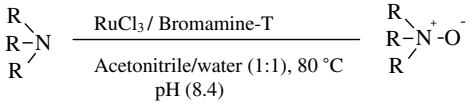


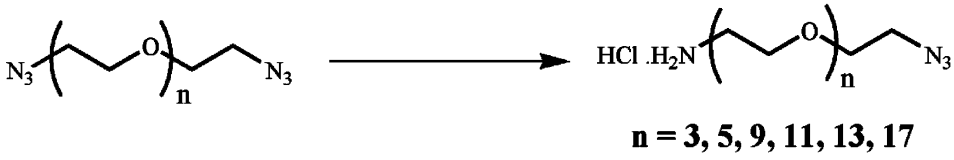
Suitably decorated β-ketoamides **2**, an aryl or alkyl hydrazine and Lawesson's reagent are suspended in THF/Py and gently heated to yield the requisite 5-(substituted-amino)pyrazoles **1**.

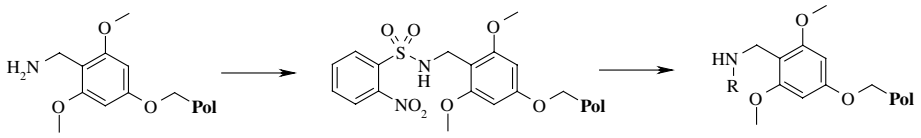




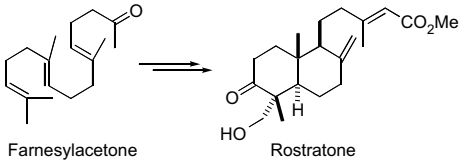




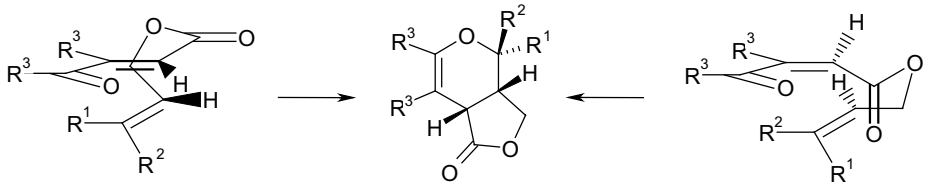


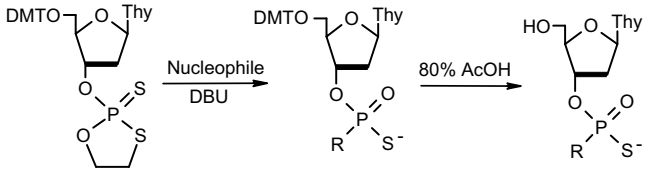


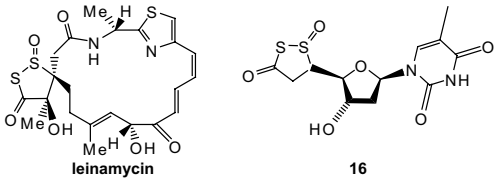
N-Alkylation of polymer-supported 2-nitrobenzenesulfonamide linkers represents an alternative route to reductive amination of aldehyde linkers.

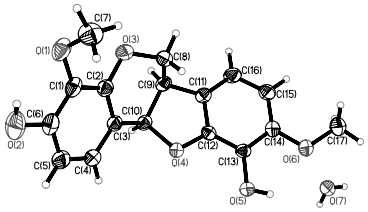


We present results, which indicate that Pd-mediated C–H bond activation can be used under mild conditions for the remote functionalization of C-4 methyl groups of molecules with different terpenoid-like skeletons containing six- or seven-membered A rings. This strategy has proved to be useful for the synthesis of the natural labdane rostratone.

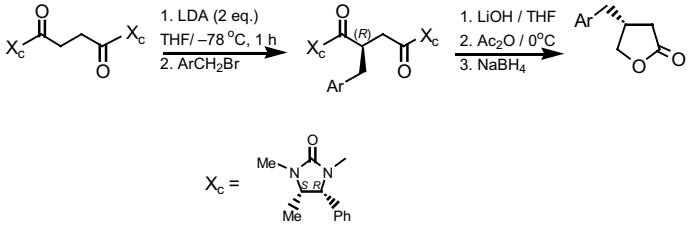


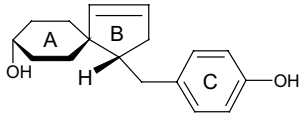




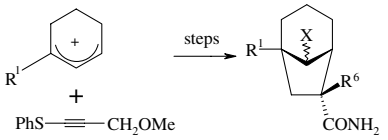


A new cyclooxygenase inhibitory pterocarpan was isolated from *Indigofera aspalathoides* and molecular docking studies were performed to find out its binding orientations in the active sites of COX-1 and COX-2.

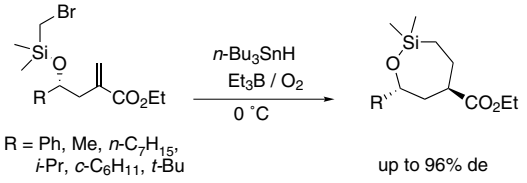


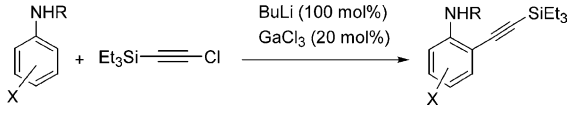


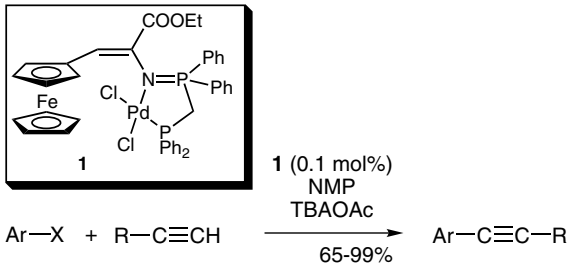
A novel spirocyclic compound (4*R*)-4-(4-hydroxy-benzyl) spiro [4,5] dec-1-en-8-ol (sequosempervirin A) was isolated from the branches and leaves of *Sequoia sempervirens*. Its structure and relative stereochemistry were mainly determined by MS, 2D NMR and X-ray means, which is the first naturally occurring norlignan containing one spirocycle with C6 (cyclohexane)–C2–C3–C6 skeleton.

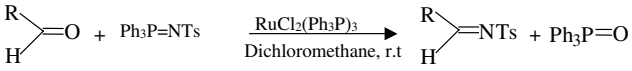


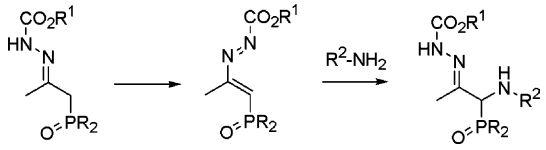
[3+2]Cycloaddition provides a convenient route to substituted bicyclo[3.2.1]octane-6-carboxylic acids, some of the amides of which are anti-convulsants.

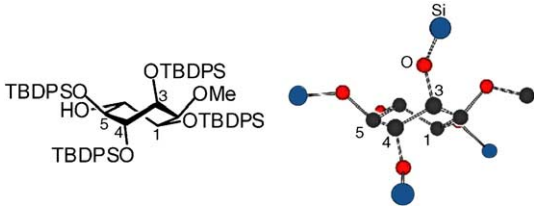


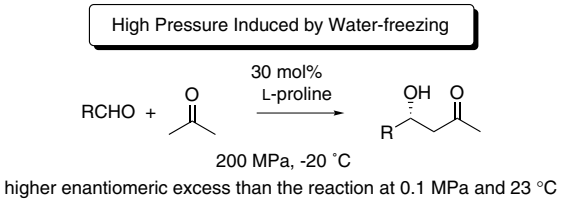


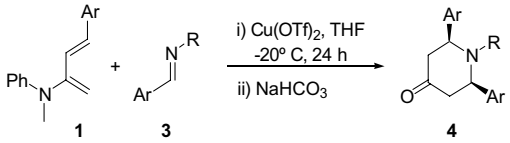




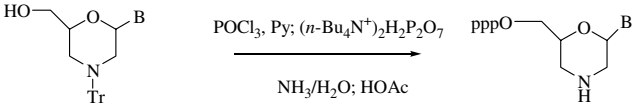






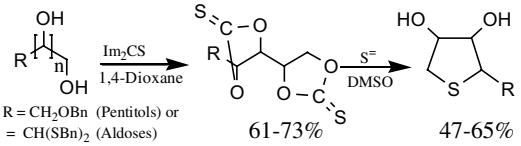


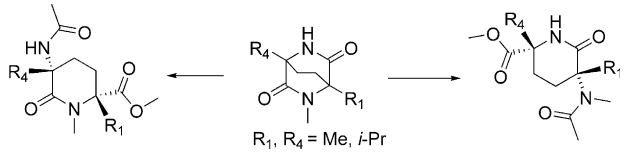
Stereoselective synthesis of *meso*-2,6-disubstituted-4-piperidones by imino-Diels–Alder reaction of 2-amino-1,3-butadienes with imines in the presence of $Cu(TfO)_2$ as Lewis acid catalyst.

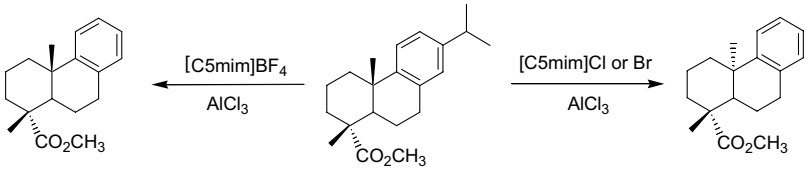


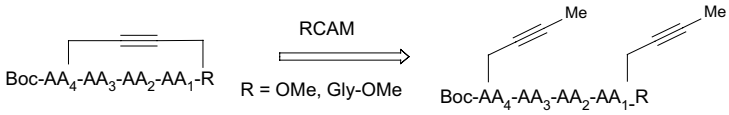
B = Ura, N^4-*Bz*-Cyt, N^6-*Bz*-Ade, N^2-*iBu*-Gua

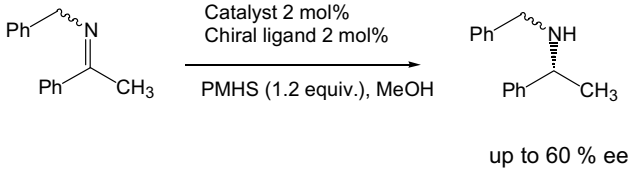
B = Ura, Cyt, Ade, Gua

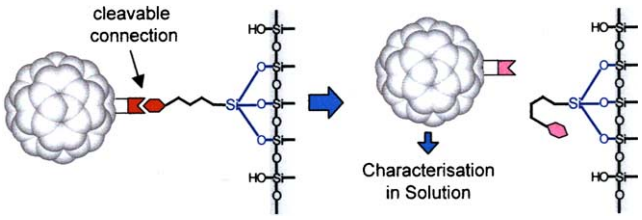




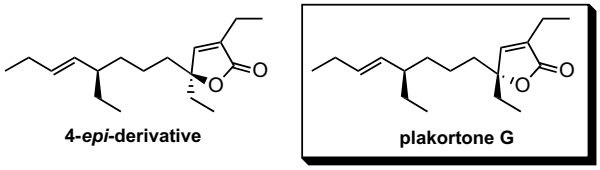


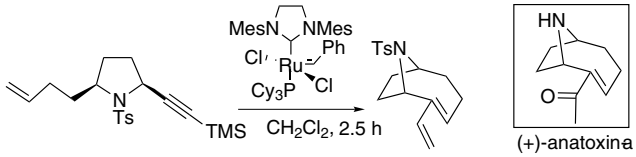




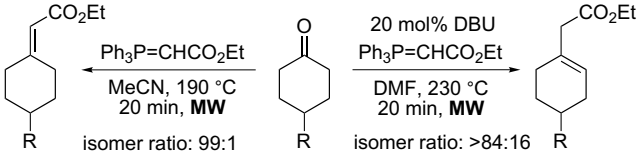


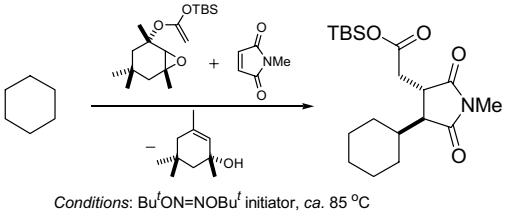
Difficulties in the characterization of grafted fullerenes can be significantly overcome with the introduction of a linkage in the fullerene moiety cleavable under predetermined conditions; this methodology permits analysis of the fullerene structure in solution.



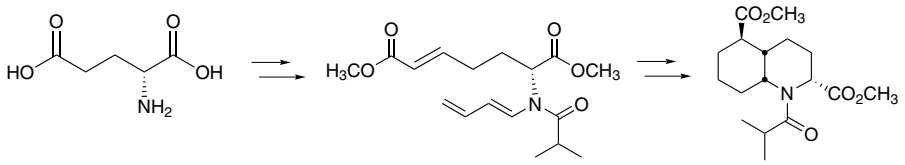


Synthesis of *N*-tosylanatoxin-*a* was achieved by metathesis of enyne in *cis*-substituents on a pyrrolidine derivatives.





Conditions: $Bu^tON{=}NOBu^t$ initiator, *ca.* 85 °C



OTHER CONTENTS

*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

COVER

The cover figure shows plakortone G, a cytotoxic metabolite from the Jamaica Sponge which was found to possess the (4*R*,8*R*)-configuration. This was unambiguously determined by its total synthesis. Details can be found in *Tetrahedron Letters* **2004**, *45*, 4393–4396.

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ISSN 0040-4039