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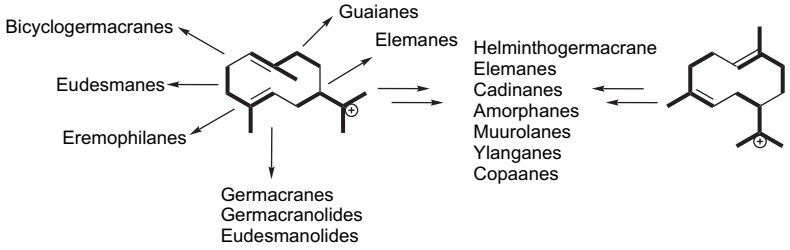
Contents

REPORT



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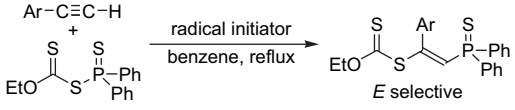
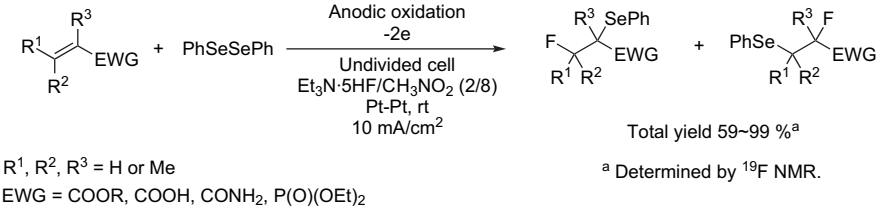
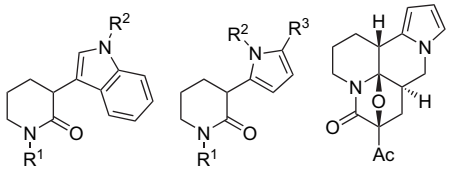
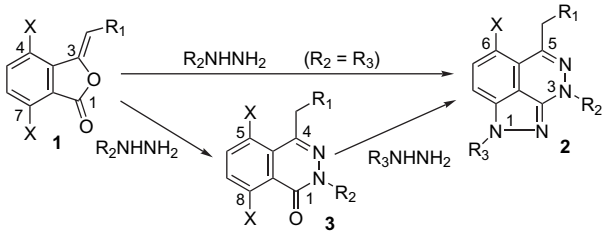
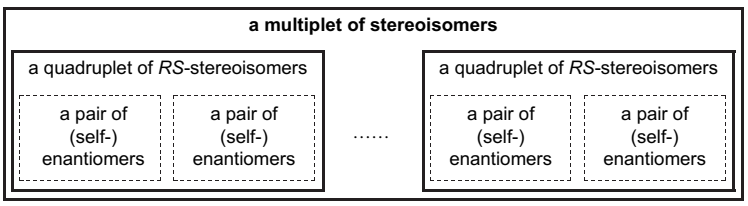
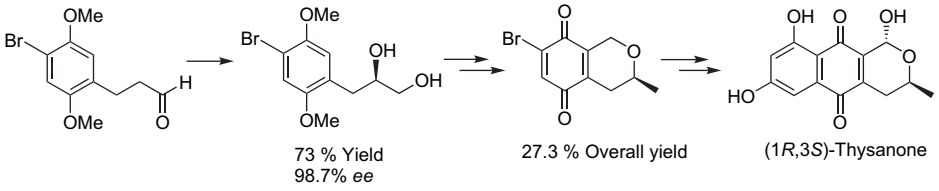


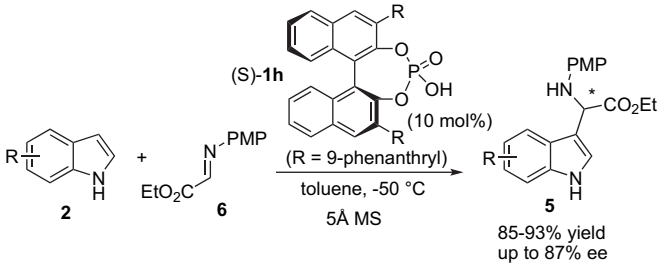


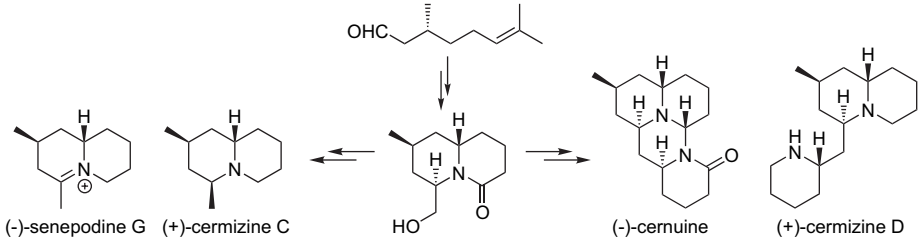




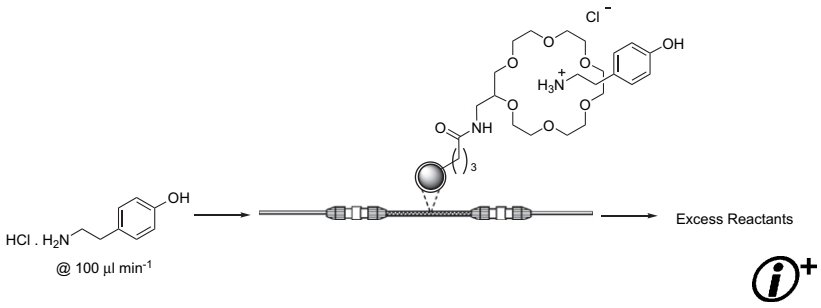


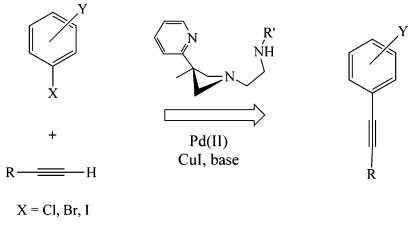


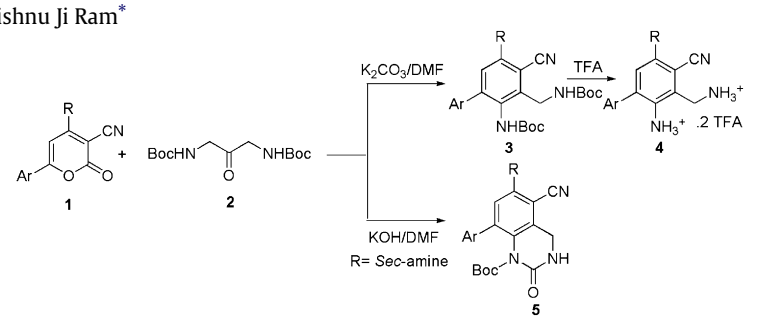


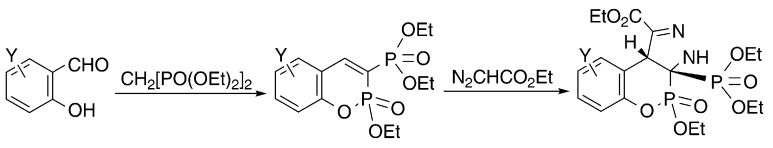


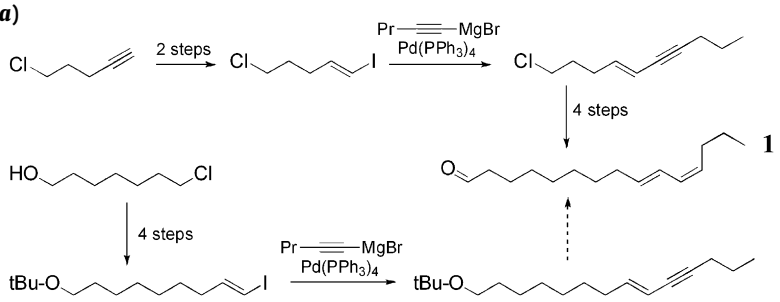
We report herein the successful immobilization of an 18-crown-6 ether derivative onto a solid support and discuss its incorporation into a continuous flow reactor whereby the sequestration of a series of primary amine salts is demonstrated. In addition, the material is subsequently employed as a non-covalent N-protecting group, providing a facile route to the O-acylation and O-alkylation of several amine derivatives without the need for formal protecting group chemistry.



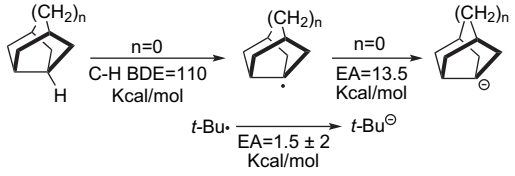


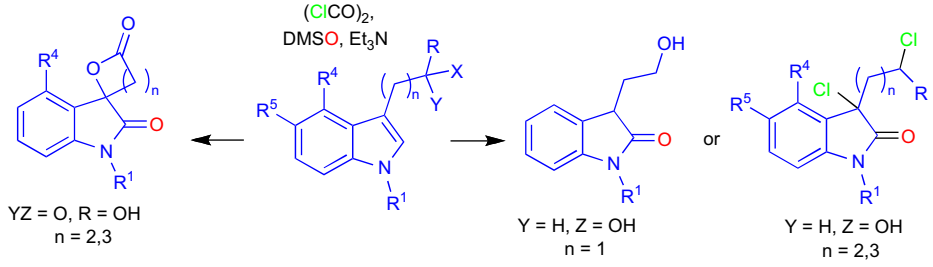


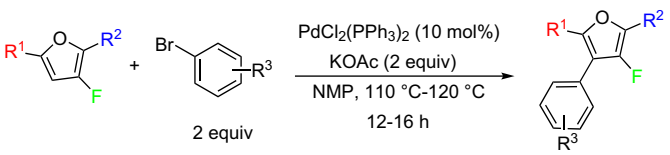


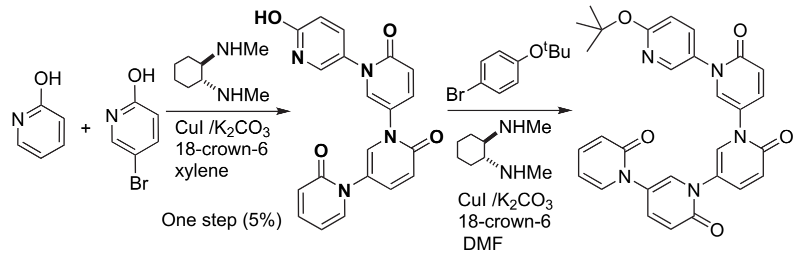


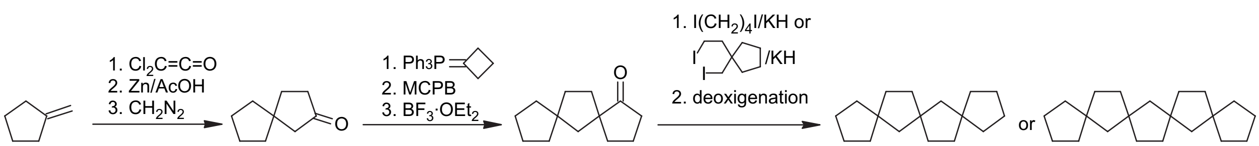
Synthesis of sex pheromone of horse-chestnut leafminer (**1**) has been achieved by the palladium-catalyzed cross-coupling reaction of 1-pentynylmagnesium bromide and suitable vinyl iodides as the key step to construct the conjugated diene moiety of the title compound.



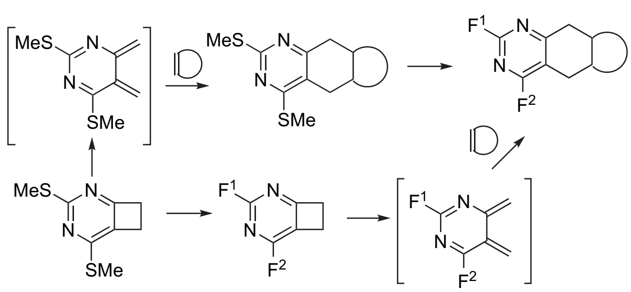




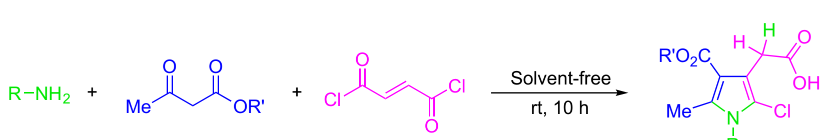


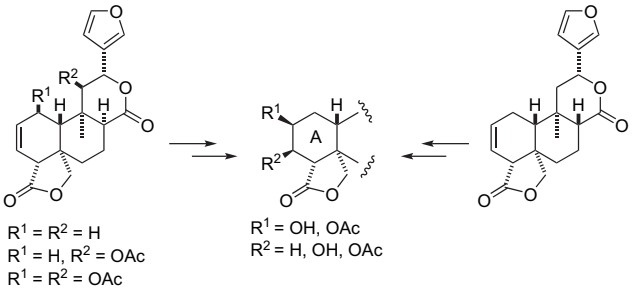


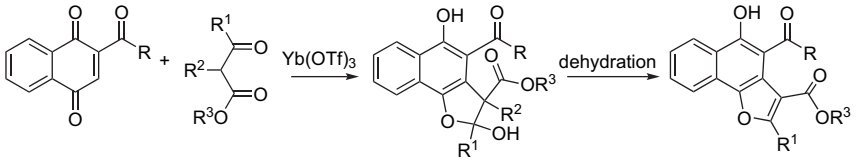
A combination of three spiroannelation methods forms the basis of a successful synthesis of the first helical hydrocarbons of 1,3-spiroannelated five-membered rings.

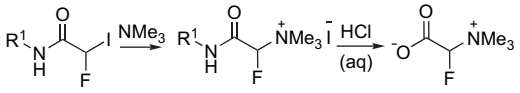


New alternative and complementary synthetic paths to prepare functionalized pyrimidine cycloadducts are reported. The choice of the synthetic route is determined by the electronic nature of functional groups on the pyrimidine *ortho*-quinodimethane.

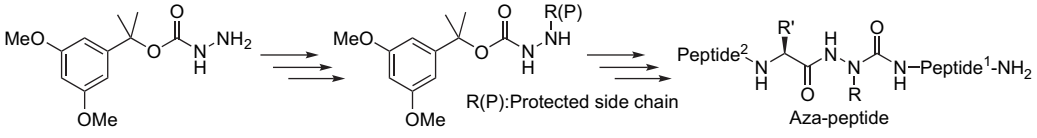








Halofluoroethanamides have been investigated as precursors to α-fluoro-α-amino amide derivatives by displacement of halide with a variety of nitrogen nucleophiles such as imides, azide and trimethylamine, with the latter leading to the synthesis of α-fluorobetaine as a first example of a fully unprotected α-fluoroamino acid.



Substituted hydrazines are precursors for many compounds of considerable scientific and industrial value. We describe the synthesis of *N′*-substituted 2-(3,5-dimethoxyphenyl)propan-2-yloxycarbonyl (Ddz) protected hydrazines. A general approach for solid phase synthesis of aza-peptides has been developed based on the in-situ activation of the *N*-Ddz,*N′*-substituted hydrazines with phosgene, followed by introduction to the N-terminus of resin-bound peptide. Ddz-protected hydrazines have wide applications in the synthesis of substituted hydrazines and in the synthesis of aza containing peptidomimetics.

*Corresponding author
Supplementary data available via ScienceDirect

COVER

Three spiroannelation methods form the basis of a successful synthesis of the first two helical hydrocarbons of 1,3-spiroannelated five-membered rings. Details can be found in Tetrahedron, **2009**, *65*, 1689–1696.

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