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Tetrahedron Letters

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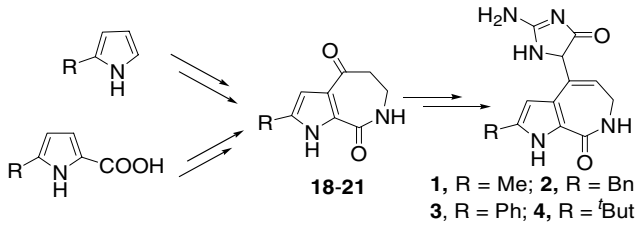
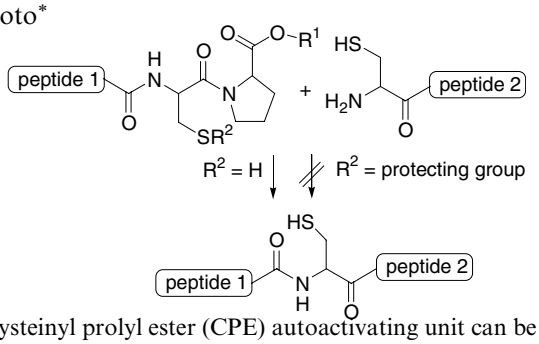
Contents

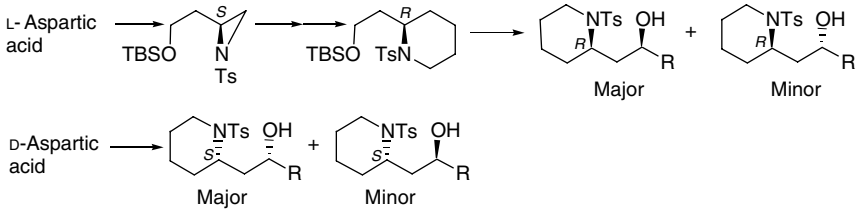
COMMUNICATIONS

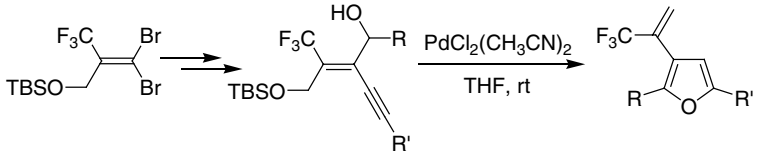


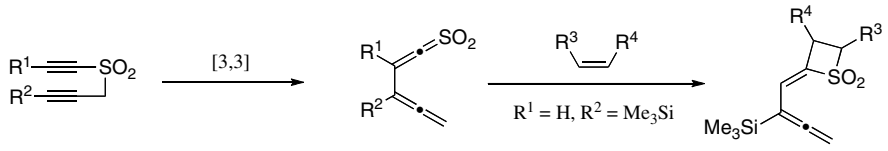
The first synthesis of 2-substituted *endo*-hymenialdisine derivatives **1**–**4** was described starting with 2-substituted pyrroles and 5-substituted pyrrolo-2-carboxylic acids.

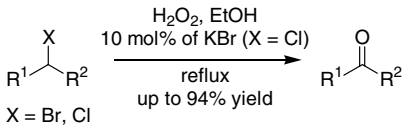


A peptide building block containing a cysteinyl prolyl ester (CPE) autoactivating unit can be controlled by the protection of the Cys residue, permitting ligation at either the C or N terminus.

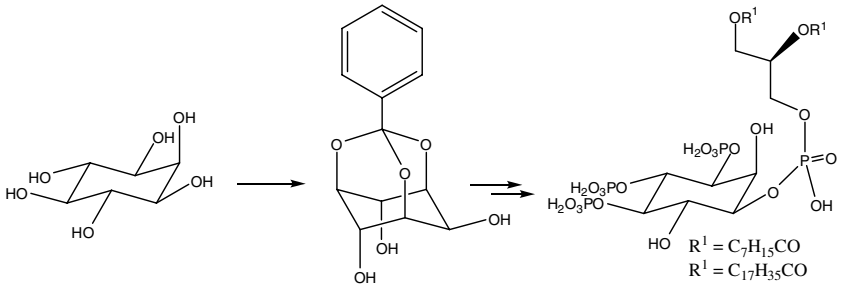


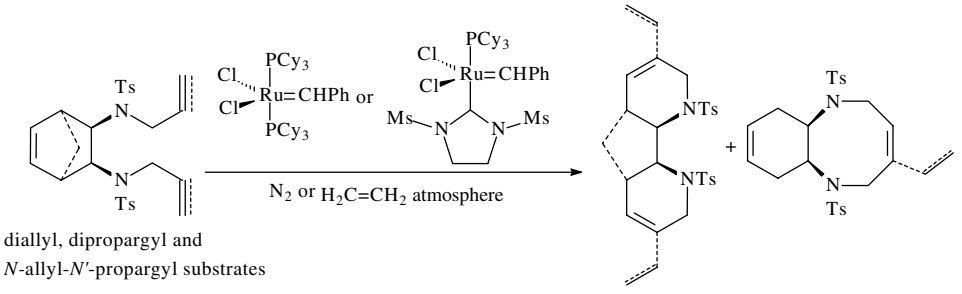




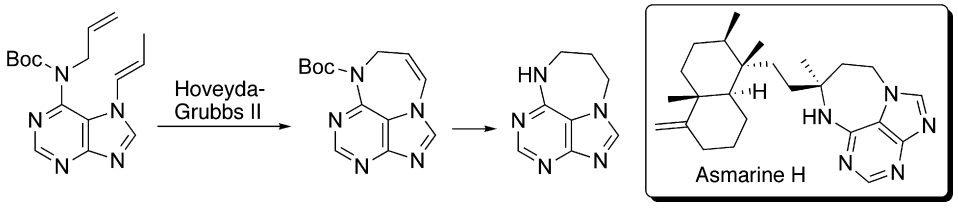


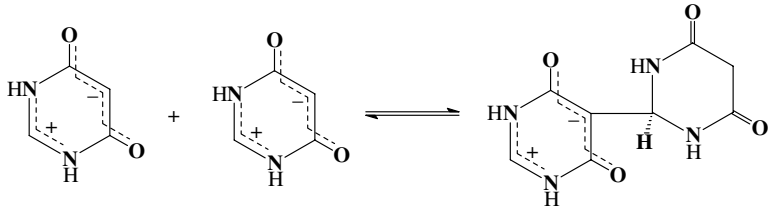
Various primary and secondary organic bromides were oxidized by hydrogen peroxide in refluxing ethanol to give the corresponding aldehydes/and ketones; organic chlorides were oxidized to the corresponding aldehydes/and ketones by the same oxidant in ethanol in the presence of 10 mol % of KBr.

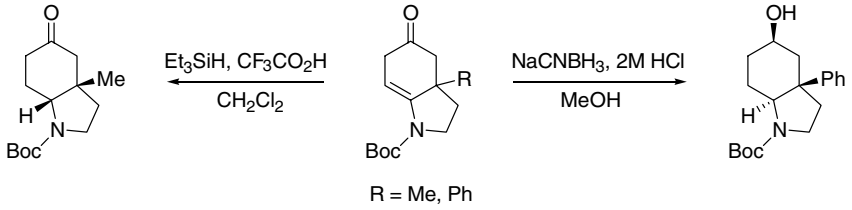




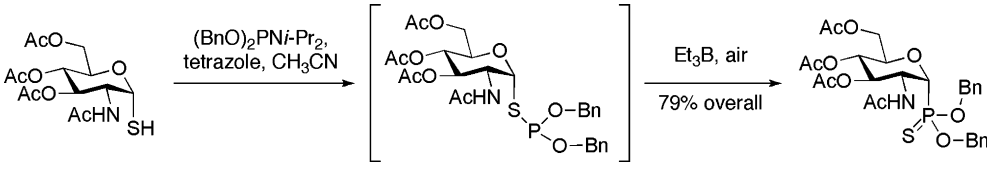
diallyl, dipropargyl and
N-allyl-*N*′-propargyl substrates

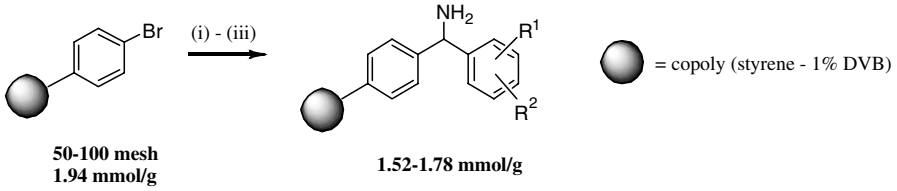




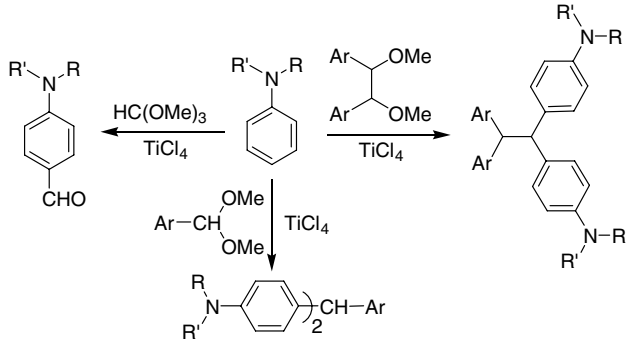


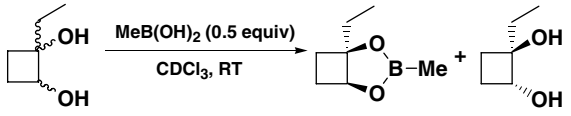
We report the divergent effects of a 3a-methyl and 3a-phenyl substituent on the chemoselectivity and stereoselectivity of reduction of the enamide moiety of *N*-Boc-tetrahydro-1*H*-indolin-5(6*H*)-ones.



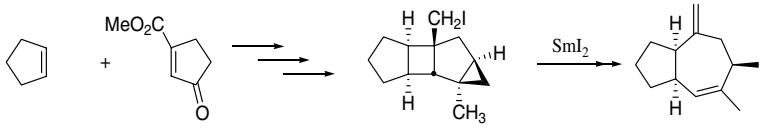


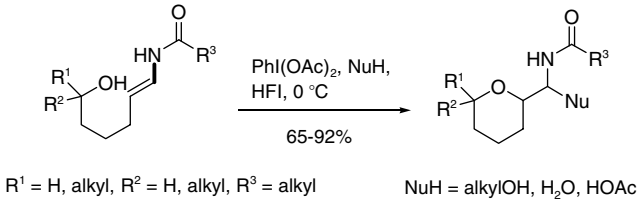
Reagents and conditions: (i) 4 equiv ^{n}BuLi, toluene 60 °C, 3 h; (ii) 10 equiv ArCN, toluene, rt, 20 min; and (iii) add 20% v/v MeOH, then 20 equiv $NaBH_4$, rt, 30 min.

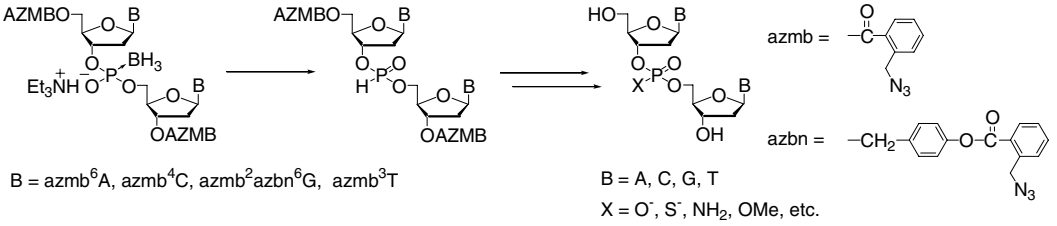


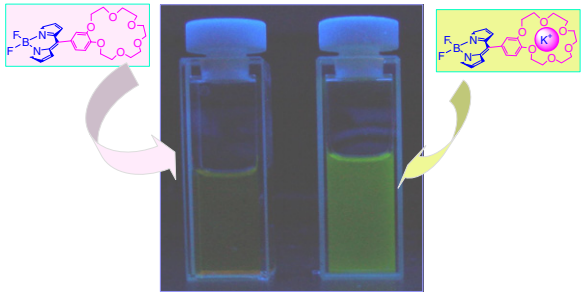


cis,trans-Stereoisomeric 1,2-diols are successfully separated by selective esterification of cis-isomer with methylboronic acid.

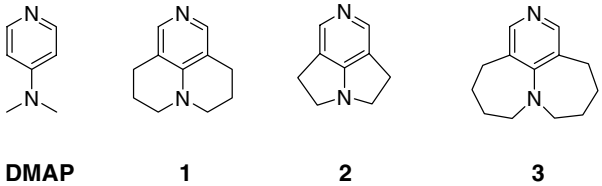


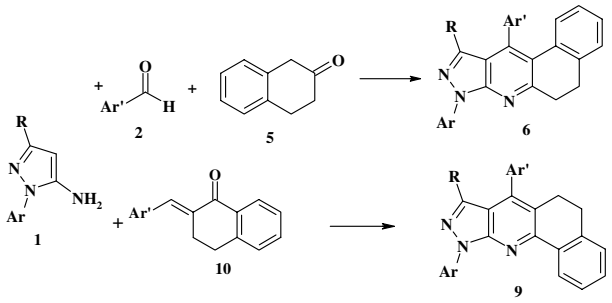


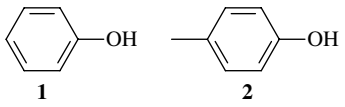




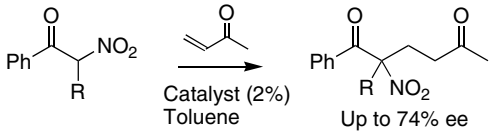
Boron dipyrrin bearing crown ethers of varying cavity sizes as chemosensors for metal ions in solution is reported.

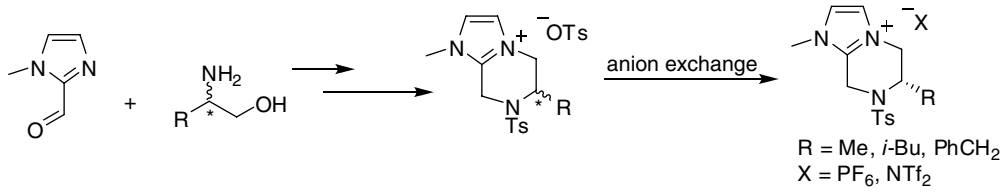


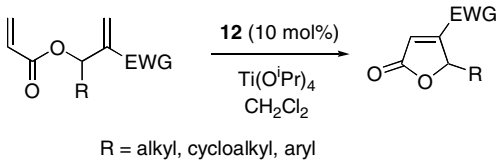


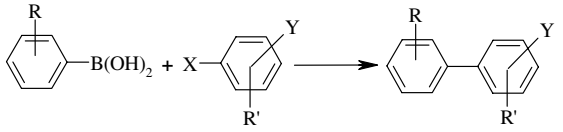


The sex pheromone of *Phyllophaga cuyabana* has been identified as a mixture of phenol **1** and *p*-cresol **2**.

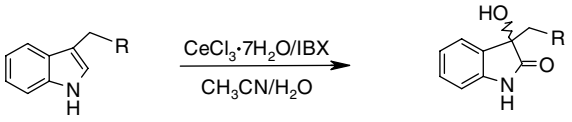




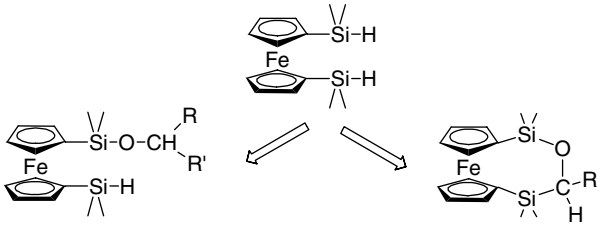


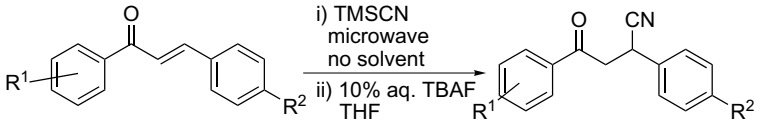


The biphenyl-based phosphine, P(*o*-$C_6H_4C_6H_4Me)Ph_2$, has been successfully applied to the Suzuki coupling of aryl halides and two bromoarylphosphine oxides with low catalyst loading and good to excellent conversions.

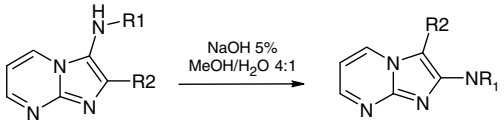


A series of ferrocene-based organosilicon compounds have been prepared via hydrosilylation or double silylation of carbonyl compounds with 1,1′-bis(dimethylsilyl)ferrocene using $(C_2H_4)Pt(PPh_3)_2$ or $Ni(PEt_3)_4$ catalysts. In general, while the platinum catalyst $(C_2H_4)Pt(PPh_3)_2$ preferentially produced cyclic double-silylated products, the $Ni(PEt_3)_4$ catalyst led to the hydrosilylated ferrocene products from aldehydes or ketones.





The addition of TMSCN to α,β-unsaturated ketones such as chalcones, 3-nonen-2-one and benzalacetone under microwave irradiation in the absence of additive and solvent, rapidly in 5 min yielded the corresponding 1,4-adducts in good to moderate yields. However, no reaction of α,β-unsaturated esters with TMSCN took place under the same conditions.



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*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

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