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Tetrahedron Letters

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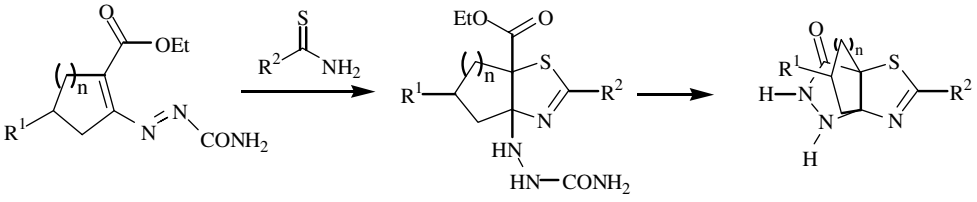
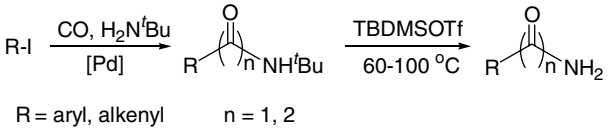
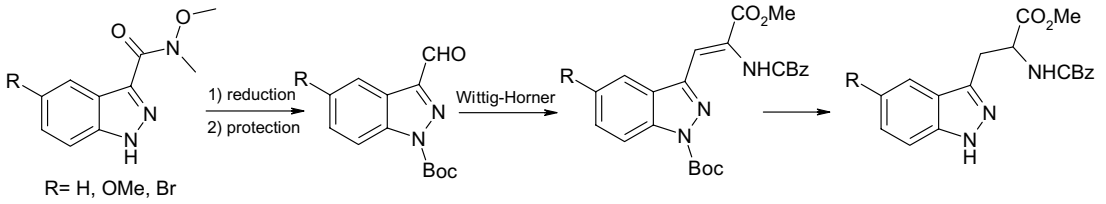
Contents

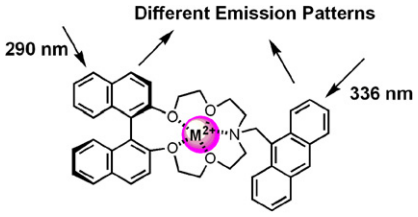
COMMUNICATIONS

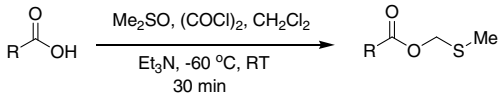




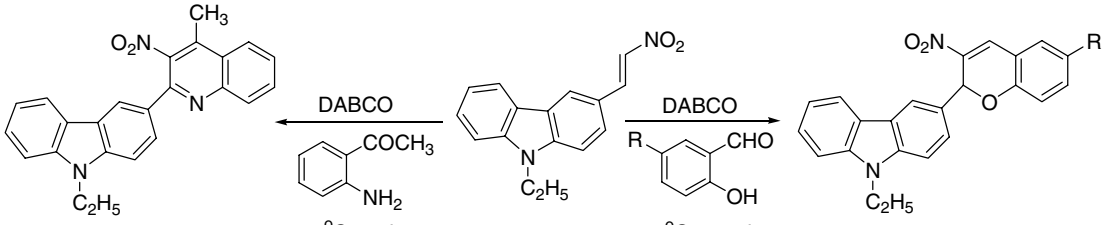
Primary amides and ketoamides have been synthesised in good yields in two steps from alkenyl/aryl iodides. The reaction sequence involves palladium-catalysed carbonylation in the presence of *t*-BuNH$_2$ followed by selective cleavage of the *t*-Bu group using TBDMSOTf.



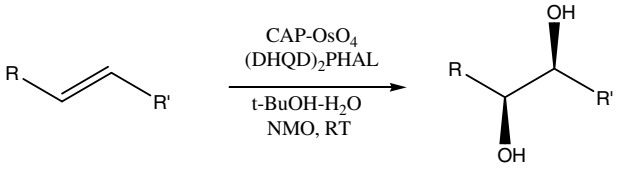




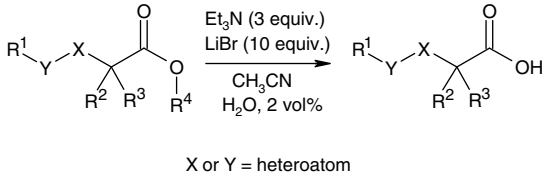
R = alkyl, alkenyl, aryl and *N*-substituted alkyl



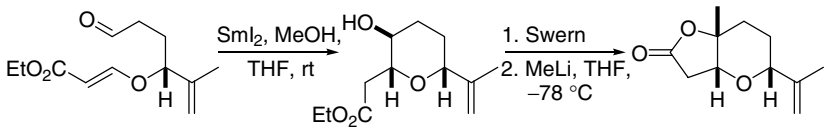
An easy and efficient synthesis of new 3-chromenylcarbazoles, 3,6-bis-(chromenyl)carbazoles and 3-quinolylcarbazoles is reported.



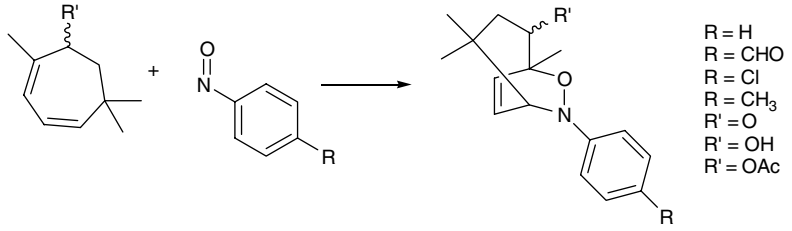
Yield: 71-96%
ee: 90-97%



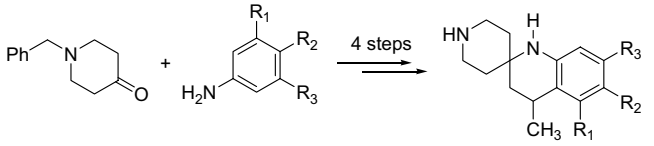
At room temperature, when treated with an amine such as triethylamine and a lithium salt such as LiBr, esters are efficiently hydrolyzed to the corresponding acids in a mild and selective manner.



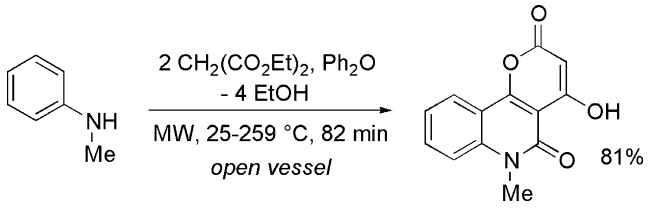
The natural product (3*R**,4*R**,7*R**)-3,7-epoxy-4,8-dimethyl-8-nonen-4-olide has been synthesised in six steps and 22% overall yield starting from simple commercially available materials. A samarium(II) iodide mediated reductive cyclisation reaction has been used to construct the tetrahydropyran core of the natural product.

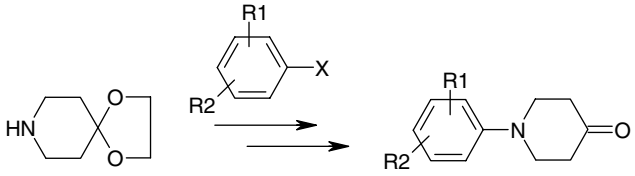


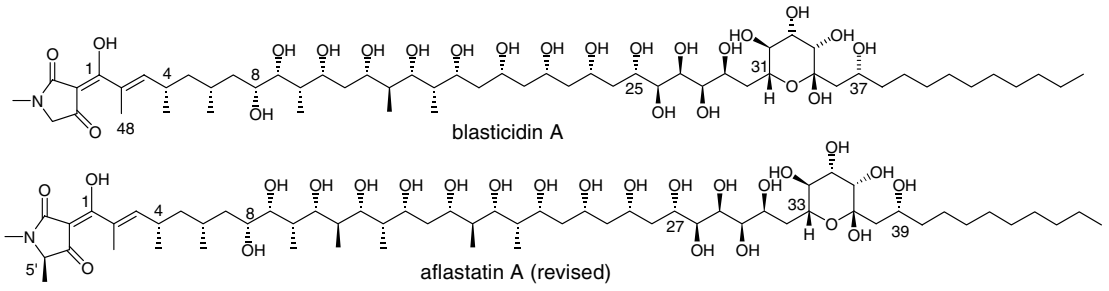
Twelve new oxazines were prepared through Diels–Alder reactions, using eucarvone derivatives as dienes and nitrosoarenes with different electronic characteristics as dienophiles. The antiparasitic activity was evaluated with in vitro assays.

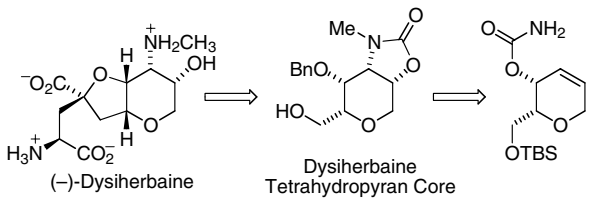


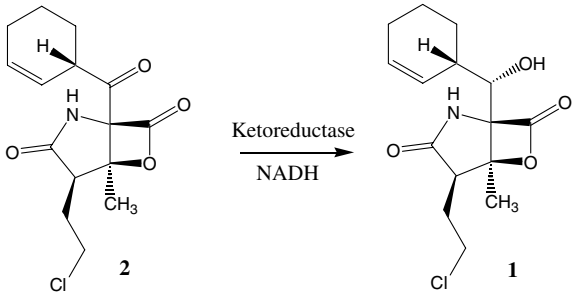
Efficient synthesis of new 3′,4′-dihydrospiro[piperidine-4,2′(1′*H*)quinolines] by a four step synthetic route based on 1-benzyl-4-piperidone reactivity is reported.

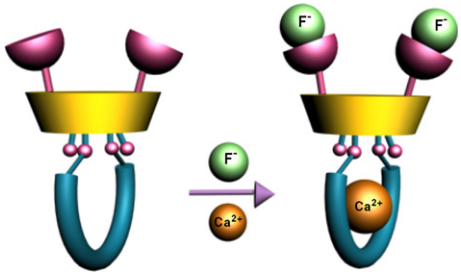


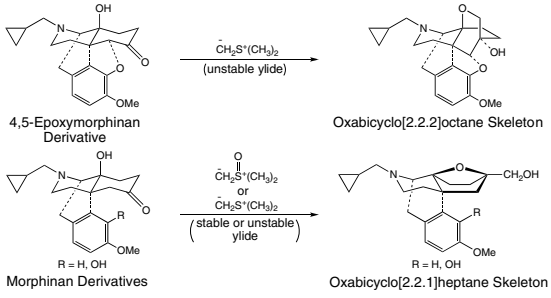


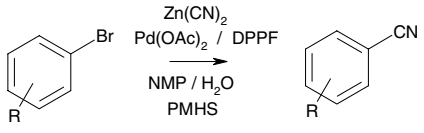


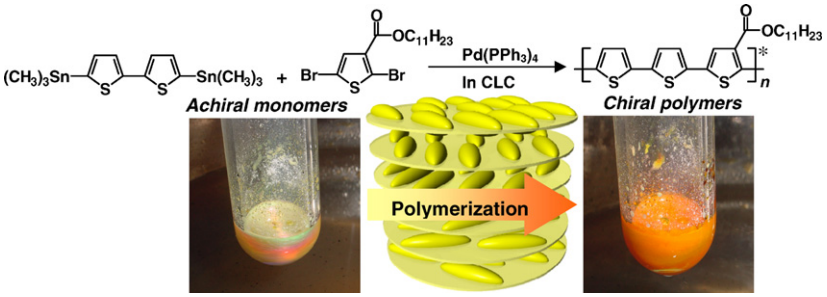


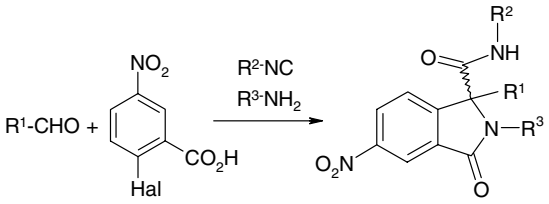


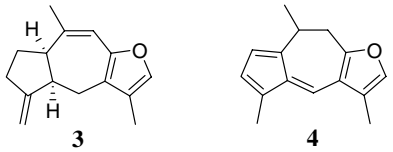






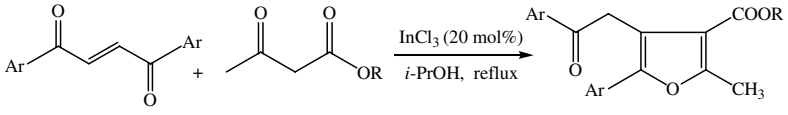


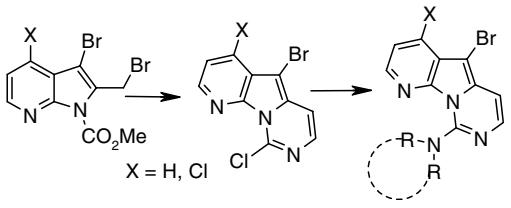


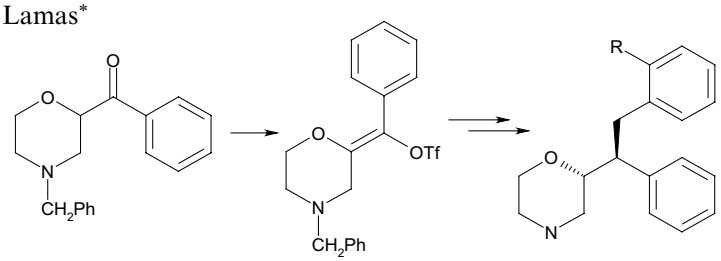


3 **4**

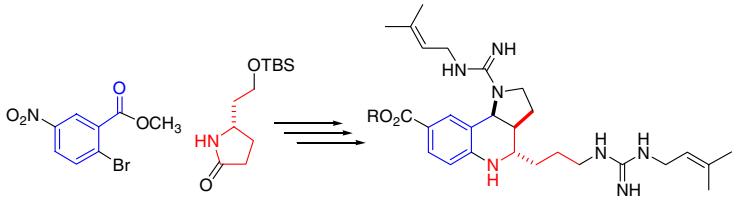
iso-Echinofuran (**3**) and 8,9-dihydro-linderazulene (**4**) are inhibitors of mitochondrial respiratory chain.



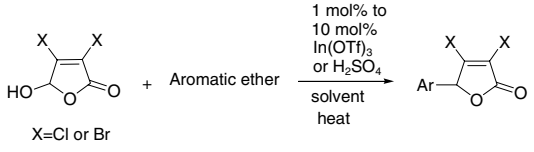


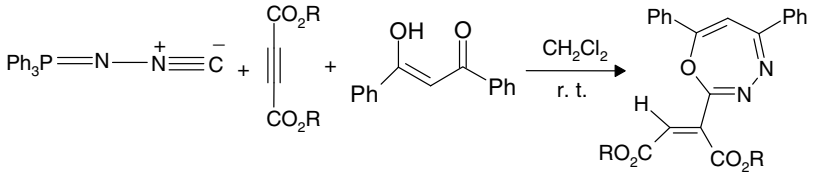


Synthesis of the title compounds has been achieved through the preparation of the key *E*-enol-triflate and its further coupling with benzylzinc reagents.

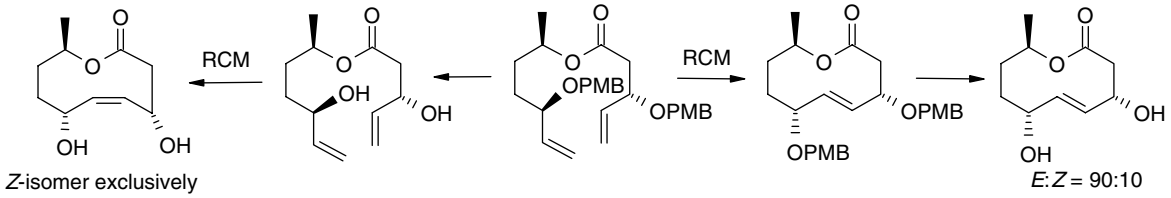


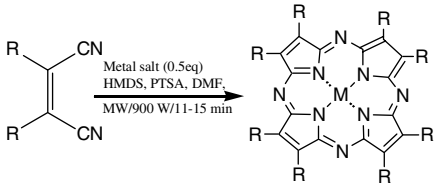
A Pd-catalyzed coupling and an intramolecular azomethine ylide–alkene cycloaddition provide an enantioselective entry to the pyrrolo[3,2-*c*]quinoline alkaloid martinellic acid.





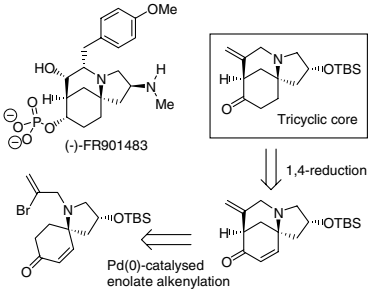
Reactions of dialkyl acetylenedicarboxylates with (*N*-isocyanimino)triphenylphosphorane in the presence of 1,3-diphenyl-1,3-propanedione proceed smoothly at room temperature to afford dialkyl (*Z*)-2-(5,7-diphenyl-1,3,4-oxadiazepin-2-yl)-2-butenedioates in high yields.

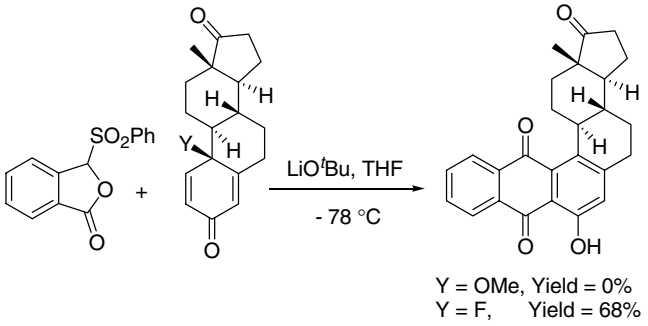


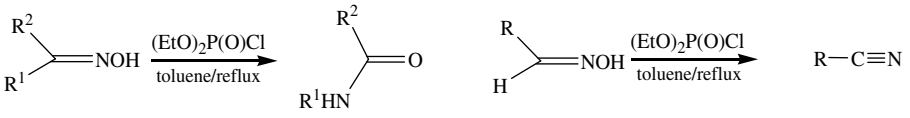


The synthesis of metalloporphyrazines with enhanced yields directly from substituted maleonitriles via tetramerization is described.

An enantioselective synthesis of the tricyclic core structure of the immunosuppressant natural product (−)-FR901483 has been achieved using a Pd(0)-catalysed enolate α-alkenylation reaction as a key step.







OTHER CONTENTS

*Corresponding author
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