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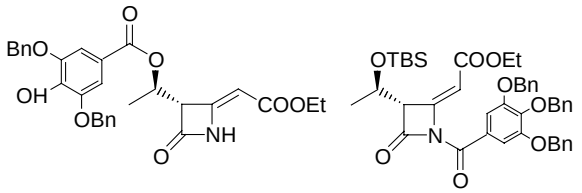
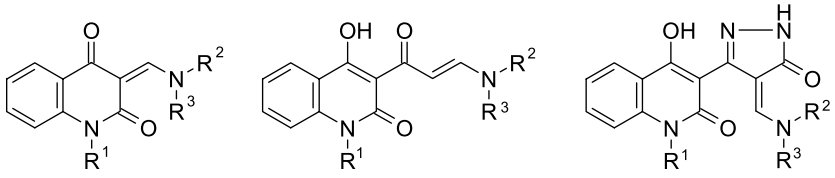
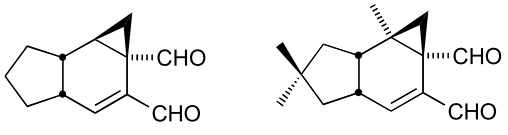
Contents

ARTICLES



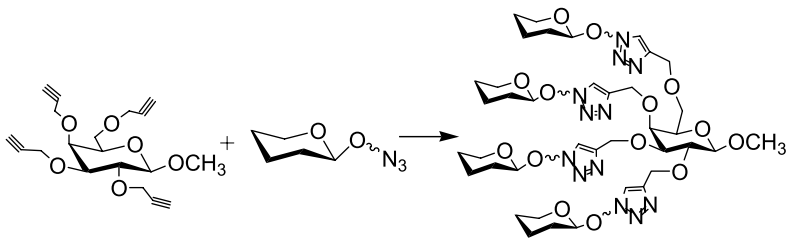


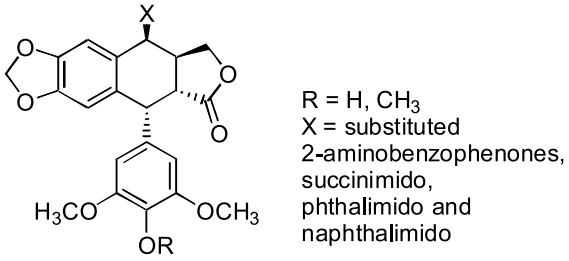
A series of 32 new enaminones derived from 4-hydroxyquinolinones are described as potential molluscicides and larvicides. The new synthesized compounds revealed efficiency against *Biomphalaria alexandrina* and *Lymnaea natalensis* snails as well as the larvae of *Schistosoma mansoni*. These compounds are found to be nontoxic to *Daphnia magna* and hence environmentally safe.

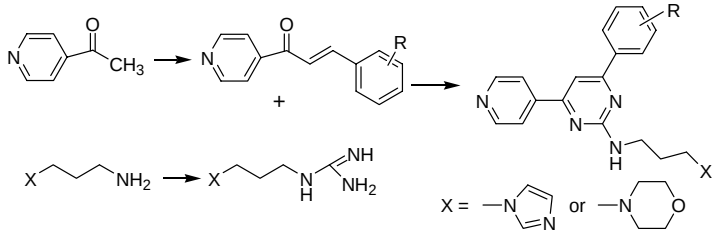


1 **2**

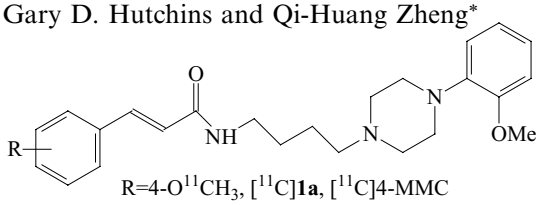
The preparation and characterization of tridemethylisovelleral (**1**) is described. Compound **1** is strongly cytotoxic toward all tumor cell lines tested, and approximately 10 times as potent as the natural product (**2**).





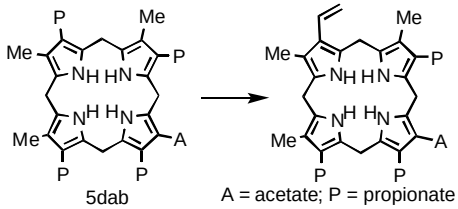


A series of 2,4,6-trisubstituted pyrimidines were synthesized and evaluated for their in vitro antimalarial activity against *Plasmodium falciparum*. Of the 18 compounds synthesized, 14 compounds showed MIC in the range of 0.25–2 μg/mL.



R=4-O^{11}CH$_3$, [^{11}C]**1a**, [^{11}C]4-MMC
R=3-O^{11}CH$_3$, [^{11}C]**1b**, [^{11}C]3-MMC
R=2-O^{11}CH$_3$, [^{11}C]**1c**, [^{11}C]2-MMC

Reported in this article are the synthesis and initial PET imaging of new potential dopamine D_3 receptor radioligands (*E*)-4,3,2-[^{11}C]methoxy-*N*-4-(4-(2-methoxyphenyl)piperazin-1-yl)butyl-cinnamoylamides.



Pentacarboxylate porphyrinogen 5dab is converted to dehydroisocoproporphyrinogen by cloned human coproporphyrinogen oxidase; this result indicates that an alternative pathway for heme biosynthesis may take place in disease states such as porphyria cutanea tarda.

*Corresponding author
Supplementary data available via ScienceDirect

COVER

2005: Human liver glycogen phosphorylase A (HLGPa) is an attractive target enzyme for discovering anti-type 2 diabetes drugs. This picture shows the interaction model for a series of indole-2-carboxamides to HLGPa derived from molecular docking simulations [Liu, G.; Zhang, Z.; Luo, X.; Shen, J.; Liu, H.; Shen, X.; Chen, K.; Jiang, H. *Bioorg. Med. Chem.* **2004**, *12*, 4147–4157].

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