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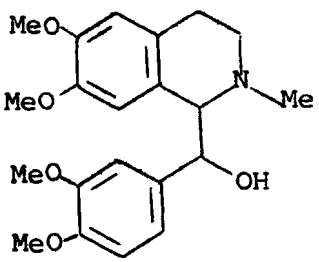
ABSTRACT

Treatment of hydroxylaudanosine (I) with formic acid for 4 h. gave the 2-arylbenzazepine (II), and longer heating gave the reduction product (III). However, when compounds (IV a,b,c) were heated with formic acid the azonine derivatives (V a,b,c) were isolated. The synthesis of amino-alcohols (IV a,b,c), the identification of the products and the mechanism of this transformation were fully discussed.

Syntheses of various 1-(α -hydroxybenzyl)isoquinoline derivatives (VI) were presented. The reaction of these compounds with various nitrile derivatives in the presence of borontrifluoride etherate gave the imidazole derivatives (VII). The reaction constitutes a novel approach for the synthesis of these compounds.



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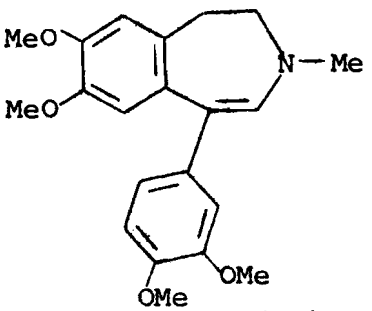

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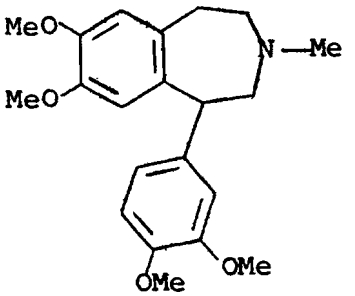

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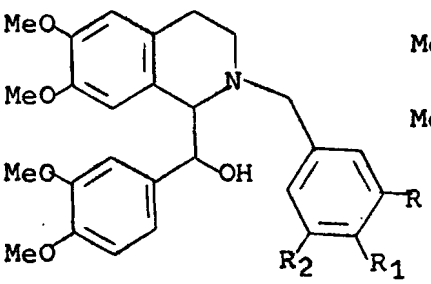

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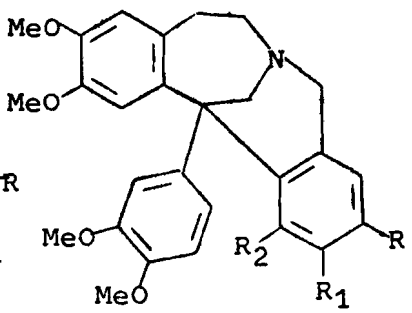
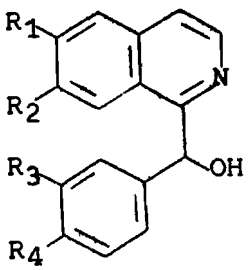


(V)

a) R = R_1= R_2= OMe

b) R = OMe, R_1= R_2=H

c) R = R_1= OMe, R_2= H



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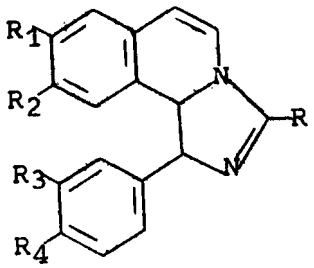

(VII)