DESIGN AND SYNTHESIS OF NATURALLY OCCURRING BIOACTIVE NON-ISOPRENOID PHENOLIC ACIDS

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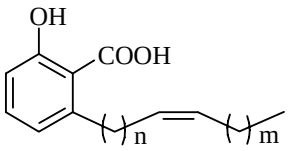
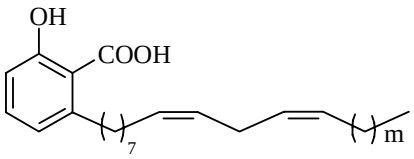
The non-isoprenoid phenolic acids are widely distributed in plants of different families notably the *Anacardiacae* and are found in trees, shrubs, many small plants and also in certain bacterial sources. Recently a series of such new alkenyl phenolic acids have been reported to occur in *Spondias mombin L*., the leaves of which are used as antimicrobial agents and in folk medicine for various purposes. These unsaturated phenolic acids showed varied biological activities such as antiviral against Coxsackie B_2 and *Herpes simplex* type 1 viruses; antibacterial against *Bacillus cereus*, *Streptococcus pyogenes* and *Mycobacterium fortuitum* and molluscicidal, against the snail Biomphalaria glabrata.

Since todate, no good method was known for the synthesis of such unsaturated phenolic acids, we have designed and achieved the synthesis of eight of these natural products along with their biologically active analogues.

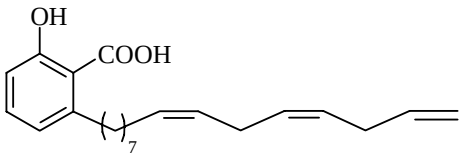
Detailed synthetic approaches along with the biological importance of these novel phenolic acids will be presented and discussed at the Conference.



1 n = 14, m = 4 **4** n = 7, m = 5
2 n = 11, m = 5 **5** n = 7, m = 3
3 n = 9, m = 5



6 m = 2
7 m = 4



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