

# Synthesis of Some Chromanone Derivatives and the Use of DNA in Evaluation of their Biological Activity

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6-Formyl-7-hydroxy-5-methoxy-2-pentamethylenechromanone (**2**) was prepared from the naturally occurring “Visnagin” and condensed with benzil, *o*-phenylenediamine and 3,4-diaminobenzophenone to give the corresponding imidazolylchromanone derivatives **3–5**. Knoevenagel reaction of compound **2** with different active methylene compounds afforded benzodipyranone derivatives **12a–c** which may be considered as analogues to the naturally occurring “Xanthyletin and Graveolone Compounds”. The structural formula of the new compounds were established by using different methods for their preparation in addition to the instrumental analyses. Some compounds in this study were biologically evaluated for their ability to bind to DNA.

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