



SDI Review Form 1.6

Journal Name:	International Research Journal of Pure and Applied Chemistry
Manuscript Number:	2014_IRJPAC_13111
Title of the Manuscript:	Synthesis of Nitrogen-Containing Chalcone via One-Pot Three-Component Reaction: part iv
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	-This is a excellent work, however please add more discussion. Please see: https://articles.e-marifah.net/kwc/f?p=pay:2:0::::P2 ISN:272470 -Please, add the importance of this work today. -Please, present the scientific problem more clearly. -Please, place names to these figures, (e.g.; Figure 1., Figure 2...). - Add schemes on the reaction mechanics. -Please talk about the relationship of this work with the parts i to iii.	More discussion was added and highlighted : Two possible routes for target molecules (chalcones with Mannich side chains) are done during this work. The first route the dialkylaminomethyl group was introduced to aldehyde and then the chalcone was prepared (part i and ii). In the second route the chalcone was prepared and then dialkylaminomethyl group was introduced (part iii and iv) The Mannich bases are important synthetic products used in different fields of applied sciences, and due to this application the present work was designed to synthesize a number of Mannich bases of chalcones that could further be assessed for their different biological activities. The importance of the work was added and highlighted : The Mannich reaction is one of the most important C-C bond formation methods in organic synthesis. The Mannich-Reaction is employed in the organic synthesis of natural compounds like for instance Peptides-Nucleotides-Antibiotics and Alkaloids. Other application are in agrochemicals such as plant growth regulators, paint and other polymer chemistry, catalysts and cross linking. The Mannich Reaction is also used in synthesis of medicinal compounds. The figures were numbered and highlighted : Figure 1: 4-hydroxy-4'-methoxychalcone (1) Figure 2: 4-hydroxy-4'-methoxy-3,5-bis-dimethylaminomethylchalcone(2) Figure 3: 4-hydroxy-4'-methoxy-3,5-bis-pyrrolidinomethylchalcone (3) Figure 4: 4-hydroxy-4'-methoxy-3,5-bis-pyrrolidinomethylchalcone (3) Aschemes on the reaction mechanism was added:
Minor REVISION comments	-Please, add more keywords. -Please, ten change by 10.	More key words were added: Aminoalkylation, Three components reaction Ten changed by 10: Aconclusion was added : The aminomethylation of chalcone by reaction with formaldehyde and



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	-Please, add more discussion. In general. Please, discuss the results. Also add conclusions. -Please, speak about on the importance of synthesis, today. -Please, write these references with the format of this Journal. -Please, add a Supporting Information	suitable amine in acetonitrile was achieved and characterization of the products and their intermediates by spectroscopic methods: UV, IR, and NMR and mass spectrometry was discussed. The importance of the synthesis : The Mannich reaction is one of the most important C-C bond formation methods in organic synthesis. The Mannich-Reaction is employed in the organic synthesis of natural compounds like for instance Peptides-Nucleotides-Antibiotics and Alkaloids. Other application is in agrochemicals such as plant growth regulators, paint and other polymer chemistry, catalysts and cross linking. The Mannich Reaction is also used in synthesis of medicinal compounds.
<u>Optional/General</u> comments	- Please, change the title and place a more specific.	The title was changed and highlighted : Synthesis of Nitrogen-Containing Chalcone via One-Pot Three-Component Reaction: part iv