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50 Years Golden Jubilee (1967-2017)

Cover Letter

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To
The Editor-in-Chief
Journal of the Mexican Chemical Society

Sub: Resubmitting the paper (**JMCS17091**) – regarding

Paper title : **Synthesis of novel pyridine-connected piperidine and 2*H*-thiopyran derivatives and their larvicidal, nematicidal, and antimicrobial activities**

Authors: Anis Ahamed, Ibrahim A. Arif, Radhakrishnan Surendra Kumar, Akbar Idhayadhulla, Selva raj Keerthana , Aseer Manilal

Type of submission: Full article

I am pleased to resubmit an original research article entitled "**Synthesis of novel pyridine-connected piperidine and 2*H*-thiopyran derivatives and their larvicidal, nematicidal, and antimicrobial activities**" for publication in Journal of the Mexican Chemical Society.

In this paper, synthesis of series of novel pyridine connected with piperidin derivatives 2a-g and pyridine connected with 2*H*-thiopyran derivatives 4a-g were synthesized and screened for antimicrobial, larvicidal, and nematicidal activities. Most of compounds have novel and new classes of larvicidal, nematicidal, and antimicrobial activities. We hope this paper very interesting to readers in the areas of organic and biological chemistry field.

Now we are rectified all problems in our revised manuscript according to the reviewers suggested comments. We are resubmitting our manuscript for your kind consideration.

Justify arguments of this paper:

- Compound **4e (**LD_{50} : 0.8μg/mL) shows highly active in larvicidal screening compared with standard *N*-*tert*-butyl-*N*,*N*′- dibenzoylhydrazine
- Compound **4e (**LD_{50} : 3.2μg/mL shows highly active in nematicidal screening compared with standard (-)-pinidinol.
- Compound **2e** (MIC: 4 μg/mL) shows highly active in antibacterial screening against *Klebsiella pneumoniae* and compound **2d** (MIC: 4 μg/mL) shows highly active against *Escherichia coli* compared with Ciprofloxacin.
- Compounds **4b** (MIC: 0.25 μg/mL) shows highly active against *Candida albicans* and compound **4f** (MIC: 2 μg/mL) shows highly active against *Microsporum audouinii* compared with Clotrimazole

Highlight of our research work:

- Synthesis of pyridine-connected piperidin derivatives
- Synthesis of pyridine-connected 2*H*-thiopyran derivatives
- Antimicrobial screening ,
- Larvicidal screening,
- Nematicidal screening

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his manuscript has not been published and is not under consideration for publication elsewhere. We have no conflicts of interest to disclose.

I am corresponding author of this manuscript; I accept all responsibility of co-authors of this submition.

The following members are to be considering as four potential referees for our manuscript:

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Sincerely

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