



SDI Review Form 1.6

Journal Name:	<u>American Chemical Science Journal</u>
Manuscript Number:	Ms_ACSJ_28201
Title of the Manuscript:	Synthesis and Biological Evaluation of Novel 4-Hydrazinyl-6-methyl-2-(alkylthio)pyrimidine Derivatives
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.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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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	Paper titled „Synthesis and Biological Evaluation of Novel 4-Hydrazinyl-6-methyl-2-(alkylthio)pyrimidine Derivatives” describes the synthesis of above mentioned compounds, but results of biological evaluation are not shown and this is the main failing of the work and should be in this context excluded from the title. Chemistry is solid and advances the field, but title, abstract and conclusion does not match the content of manuscript related to biological tests. Paragraph 3.1. <i>Biological properties of synthesized compounds</i> should be supported with relevant biological data, it is not enough just to write that the preliminary test shows that some substances exhibiting growth promoting properties. Which are these compounds? The relevant scientific data for these findings are missing. In the experimental part for more than half compounds ¹³C NMR data are not given (only for 9 of 28 compounds ¹³C NMR data are shown). It should be included in the manuscript.	Dear reviewer, we thank you for the detailed analysis of this article, your comments and suggestions on it. We have changed the title. To be noted that in this study only preliminary tests were carried out to show that the series of synthesized compounds may be of interest in the search for new plant growth regulators. Further tests will show which properties will prevail – growth stimulant or inhibitory. The structures of the synthesized compounds were proved by ¹H NMR spectra and elemental analysis. ¹³C NMR spectra were recorded mainly for one of the 2-S-substituted products or to determine tautomeric structure.
Minor REVISION comments	Issues that need to be addressed: 1. Biological evaluation should be omitted from the title, only if biological data will be included in the manuscript 2. Lines 3 and 4: instead of 4-Hydrazinyl-6-methyl-2-(alkylthio)pyrimidine should be 2-(alkylthio)-4-hydrazinyl-6-methyl-pyrimidine. Please harmonize throughout the manuscript (lines 8, 15, 292, 308, 309, 345) 3. Line 9: instead of N-phenylhydrazine should be <i>N</i>-phenylhydrazine	



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	4. Line 10: instead of heterocucclization should be heterocyclization 5. Lines 10, 11, 16: instead of pyrazolyl-pyrimidines should be pyrazolylpyrimidines; instead of pyridazinyl-pyrimidines should be pyridazinylpyrimidines 6. Lines 12, 348: in vitro should be in intalic (<i>in vitro</i>) 7. Line 21: instead of cycle should be moiety 8. Line 30: instead of derivative should be derivatives 9. Line 47: instead of heterocyclies... should be heterocycles and carry out preliminary biological activity..(specify!) 10. Lines 166, 171, 177, 182: -N- should be in intalic 11. Line 189: 5 and 6 should be bold (5 and 6) 12. Line 193: 7-methyl should be 7-Methyl 13. Line 248: Last part of sentence should be omitted (it is not Latin alphabet) 14. Lines 292, 293: name of compounds should be written in Latin alphabet Minor spell check is required throughout the manuscript	
<u>Optional/General</u> comments	These are my comments and I think that the manuscript needs to be corrected and completed with preliminary biological test before accepting for publication. The work is solid and advances the field.	