



SDI Review Form 1.6

Journal Name:	Journal of Materials Science Research and Reviews
Manuscript Number:	Ms_JMSRR_43547
Title of the Manuscript:	MALDI MS study of complexed alkaloid from Colchicum species
Type of the 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>)

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	1. Figures 2 – 7 are not present in the manuscript 2. Compound can be readily detected as [M+H]⁺, [M+Na]⁺ and [M+K]⁺ ions in positive ion MALDI-TOF mass spectrometry (MS) experiments. This not only decreases sensitivity but can also lead to overlapping m/z values of the various adducts of different compounds. Additives can be used to promote the formation of a particular adduct, improving sensitivity, reducing spectral complexity and enhancing structural characterization. Salt types (acetates, chlorides, and nitrates) incorporated into a matrix solution at concentrations between 5 and 80 mM, can be considered to promote the formation of the particular adduct, and these salts are called ADDITIVES. Additives are used in the presence of a determined matrix and is not the complex itself which is detected in MALDI- TOF MS. 3. In fact, on page 3 Authors mentioned that DITHRANOL was used as a matrix. What is the reason to use dithranol? This matrix is usually used to detect aliphatic compounds. For compounds like colchicine, DHB can be used. It should be a comparison between these matrixes. 4. Colchicine is easier to analyze with the electrospray technique. What is the reason to incorporate MALDI-TOF MS in its detection? After this study, which one is better? 5. There are not showed MALDI-TOF MS spectra for Complexes or ms/ms studies, Authors need to show at least one of them. What is the reason to show the dithranol MALDI-TOF mass spectrum? This spectrum is showed in negative mode, but all the analyses are mentioned to be done in positive mode. In this regard, the legend of Figure 2 is wrong, because is not the "MALDI-TOF mass spectrum of complex 5" is the "MALDI-TOF mass spectrum of Dithranol" 6. Adduct like [M+Li]⁺, [M+Na]⁺ are difficult to fragment. How can you explain the fragmentation route for all the ions present in table 2? Are they as [M+H]⁺ or as adducts? 7. Page 11, line 149: Authors mentioned "[14, Fig. 3]", there is not Figure 3	



SDI Review Form 1.6

Minor REVISION comments	1. It says “FT IR, UV vis, ESI MS, etc”, it should say “FT-IR, UV-vis, ESI-MS, etc” 2. Page 4, paragraph 66, it says “ ... have been already reported ... “. However, there is no reference.	
Optional/General comments	1. Tables are really bad designed to understand	

PART 2:

	<u>Reviewer’s comment</u>	Author’s comment <i>(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)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

Name:	Daniel Arrieta-Baez
Department, University & Country	Instituto Politecnico Nacional–CNMN, Mexico