

Review Form 3

Journal Name:	Journal of Advances in Biology & Biotechnology
Manuscript Number:	Ms_JABB_123553
Title of the Manuscript:	Differential variability of maize (Zea mays L.) inbred lines to moisture-stress at reproductive stages and DNA methylation studies of identified contrasting inbred lines under moisture-stress conditions
Type of the Article	

General guidelines for the 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 guidelines for the Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</p>	<p>Moisture stress is of particular importance for maize, one of the most cultivated plants worldwide. This stress has repercussions on the pollen, with negative influence on production, so both the quantity and quality of the pollen is highly important. The epigenetic changes in leaves and immature anthers studied through methylation sensitive random amplification polymorphism is highly important for the study of drought tolerance in maize and for improving the genotypes to face this stress better. Comparative DNA methylation analysis under drought conditions revealed that leaves and immature anthers may differ in the level and pattern of DNA methylation, with more changes occurring in the leaves. I find these information interesting and useful for the breeding activity and I think are also of interest for the scientific community. I really liked reading the manuscript and I think it should be accepted for publication after addressing some minor revision.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>-You repeat "inbred lines" and "moisture stress". Maybe replace the second "inbred lines" with "genotypes":</p>	
<p>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</p>	<p>-Please specify the species in the first part of the abstract. Maybe "eight maize inbred lines" or "initiation of reproductive stage in maize"</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>Yes</p>	
<p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p>	<p>-The methods used are also appropriate, the author(s) provide useful details, the equipment is suitable for the study. The experiments can be reproduced easily, all the information regarding the methodology used being provided -the inbred lines used are diverse, allowing to find differences both regarding quantitative traits and variation in DNA methylation pattern -the results are clearly presented</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>Faostat 2019 could be updated to a newer year, as new data is available Rest of the references are sufficient</p>	
<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>-Use % instead of per cent -"make up" from line 51 could be replaced with "structure" -"Therefore, all genotypes of maize are not equally affected by drought due to high level of variability in genetic background of this crop" lines 52-53 could be rephrased as "maize genotypes are not equally...". -Line 176 "previous above", please chose just one option -Line 212, I think is "tubes containing the sample" not the other way around Minor English editing</p>	
<p>Optional/General comments</p>	<p>-Table 5, according to the General Guideline for Authors, Correct expression: (P = .05). Wrong Expression: (P < .05), unless P < .001. - arrange the tables accordingly the guideline - if possible, also compare your results with other studies regarding maize, not just other species, in the discussion part</p>	

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PART 2:

	Reviewer's comment	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:	Roxana Elena Calugar
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