

### Review Form 3

Journal Name:	<a href="#">Asian Journal of Advances in Agricultural Research</a>
Manuscript Number:	Ms_AJAAR_128946
Title of the Manuscript:	AP2/ERF transcription factor gene families in crop plant disease responses
Type of the Article	Review 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: Comments**

	<b>Reviewer's comment</b>	<b>Author's Feedback</b> <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<b>Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.</b>	This manuscript provides valuable insights into the role of AP2/ERF transcription factors in plant disease resistance, a crucial area of research for enhancing crop resilience to biotic stresses. By elucidating the mechanisms through which these transcription factors regulate immune responses, it offers potential strategies for developing crops with improved disease resistance. The integration of AP2/ERF genes in breeding programs could accelerate the development of stress-tolerant varieties, which is essential for food security in the face of climate change and increasing pathogen pressures. Additionally, the manuscript highlights current research gaps and suggests future directions, contributing to the ongoing advancements in plant molecular biology and biotechnology.	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	<p>The title "AP2/ERF transcription factor gene families in crop plant disease responses" is generally suitable as it clearly indicates the focus of the article on the AP2/ERF gene family and their role in plant disease resistance. However, it can be made slightly more specific to emphasize both the molecular mechanisms and the practical applications for crop improvement.</p> <p><b>Suggested alternative titles:</b></p> <ol style="list-style-type: none"><li>1. "Role of AP2/ERF Transcription Factors in Enhancing Disease Resistance in Crop Plants"</li><li>2. "Molecular Mechanisms of AP2/ERF Transcription Factors in Plant Disease Resistance"</li><li>3. "AP2/ERF Transcription Factors: Key Regulators of Crop Immunity Against Biotic Stress"</li></ol>	

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<p><b>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.</b></p>	<p><b>Yes</b></p> <p>The abstract of the article is generally comprehensive, providing a good overview of the topic and the focus on the role of AP2/ERF transcription factors in plant disease resistance. However, there are some areas where additional details could enhance clarity and depth, as well as a few suggestions for potential deletions to streamline the content.</p> <p><b>Suggestions for Addition:</b></p> <ol style="list-style-type: none"> <li><b>Specific Mechanisms of Disease Resistance:</b> <ul style="list-style-type: none"> <li>While the abstract mentions AP2/ERFs' involvement in disease resistance, specifying the key mechanisms (e.g., activation of immune receptors, regulation of secondary metabolites, ROS production, etc.) would add depth. Briefly stating how AP2/ERFs contribute to these mechanisms would provide the reader with a clearer understanding of their function.</li> </ul> </li> <li><b>Impact on Crop Improvement:</b> <ul style="list-style-type: none"> <li>A mention of the potential applications of this knowledge for crop breeding or biotechnology could make the abstract more relevant to agricultural research. For example, "Understanding the role of AP2/ERFs could lead to new strategies in developing disease-resistant crop varieties through genetic engineering or marker-assisted selection."</li> </ul> </li> <li><b>Current Research Gaps:</b> <ul style="list-style-type: none"> <li>The abstract briefly mentions future research directions. Expanding on the specific research gaps (e.g., insufficient understanding of AP2/ERF interactions with other signaling pathways or the need for field trials) would make the review's significance clearer.</li> </ul> </li> </ol> <p><b>Suggestions for Deletion:</b></p> <ol style="list-style-type: none"> <li><b>Stomatal Immunity:</b> <ul style="list-style-type: none"> <li>While stomatal immunity is an interesting concept, it is mentioned without adequate explanation in the abstract. Unless the article delves deeply into this aspect, it might be beneficial to remove it or replace it with a more universally understood mechanism of disease resistance. Alternatively, a brief elaboration could be added.</li> </ul> </li> <li><b>Overlapping Terminology:</b> <ul style="list-style-type: none"> <li>Terms like "disease resistance" and "disease resistance mechanisms" are used interchangeably but could be more streamlined. Consider rephrasing to avoid redundancy, for example, by combining "disease resistance mechanisms" with specific examples of how AP2/ERFs contribute to them.</li> </ul> </li> </ol>	
<p><b>Is the manuscript scientifically correct? Please write here.</b></p>	<p>Yes</p>	
<p><b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b></p>	<p>Yes</p>	
<p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>	<p>Yes</p>	
<p><b>Optional/General</b> comments</p>		

**PART 2:**

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

**Reviewer Details:**

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