

Peer Review

Review of: "Microarray Profiling of *Arabidopsis thaliana* Transcriptome: A Genome-Wide Exploration of High Light Stress Responses"

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There is a corrected version of your review with some adjustments for clarity and flow:

The authors present an important topic, focusing on the molecular mechanisms underlying light stress adaptation by utilizing the available dataset from *Arabidopsis thaliana*. While the topic is valuable, the authors' conclusion regarding the complicated interplay between metabolic pathways, based on the two exemplary genes from each pathway, does not fully support their claims.

The authors observed 143 genes that were differentially expressed in the Control vs Light comparison, and 217 significant genes in the Dark vs Light comparison. It would strengthen their findings if they could discuss additional genes from the photosynthesis and phenylpropanoid pathways, beyond LHCBI, PsaA, or PAL1, to provide further support for their conclusions.

Specific comments:

1. Does UVR8 have a long name? If so, could the authors provide it?
2. In the introduction section, the authors write, "Despite previous efforts, an integrated analysis of gene expression under high-light conditions compared to dark and control conditions remains underexplored." Could the authors clarify what they mean by "control conditions" in this context?
3. In the Materials and Methods section (2.1), could the authors specify the control and high-light conditions, such as light intensity and the duration of light stress?
4. The font in Figure 3 should be made larger for better readability.

This version improves the flow and makes the review more concise. Let me know if you'd like any further changes!

Declarations

Potential competing interests: No potential competing interests to declare.