

[P3] Abiotic Stress for Crop Production

Thu. Sep 9, 2021 12:15 PM - 2:00 PM Room 3 (Poster) (Abiotic Stress for Crop Production)

1:15 PM - 2:00 PM

[P3-26]Root Type-Specific Transcriptome Diversity in Salinity Tolerant and Sensitive Rice Varieties

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Salinity tolerance in rice is a very important trait especially in areas affected by soil salinity such as coastal regions in rice-producing countries. The roots are the key organs that detect and respond to salinity stress; thus, it is important to have an understanding of how root growth is regulated. Previous studies showed that the different types of rice roots respond differently to abiotic stress and the difference can be related to the difference in function. However, the molecular mechanism of this differential response is still uncovered. In this study, the gene expression profiles of nodal roots, S-type lateral roots, and L-type lateral roots from two contrasting rice genotypes were compared. Significant differences in transcriptome profiles among root types might indicate difference in function, especially during response to salinity stress. The details of the gene expression profiles and gene categories identified will be presented and discussed.