

## Study on the Expression of Drought Tolerant Genes in Water-Stressed Basella Alba and Basella Rubra

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**Abstract :** Drought impact on the production of food crops for the benefit of mankind cannot be overemphasized. This study shows the different kind of genes expressed at various level of drought regimes on Basella alba and rubra using a real-time PCR machine. The planting was done in the screen house while the gene expression study was carried out in the laboratory. Sandy-loamy soil was collected and four levels of drought regime was used as treatment and a control experiment was set up for the two vegetables. Drought interval of 5, 10, 15 and 20 days were used as treatments while a control experiment which was not starved of water at any point was also set up, five replicates were set up for each treatment. Stress was introduced at 12 Weeks after planting (WAP). From the result of this study, Basella alba shows the highest amplicon size of 34.6 and 52.32 for GmPCS5 and HVA1 respectively which by implication means these genes were expressed the more as the stress period interval increases.

**Keywords :** water stress, basella alba, basella rubra, HVA1

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