



RESEARCH PAPER

Proline, chlorophyll stability index and relative water content interpretation of water stress adoption in Kodo millet (*Paspalum scrobiculatum*) genotypes

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Abstract : Kodo millet (*Paspalum scrobiculatum* L.) is one of the important nutricereal crops, which is mainly cultivated in India. Water stress is considered the most devastating environmental stress, which decreases crop productivity more than any other environmental stress. Drought is the most important abiotic factor considered as one of the crop performances limiting factors and a threat for successful crop production. The aim of this study was to evaluate and compare water stress effects on chlorophyll content, relative water content, chlorophyll stability index, proline and yield of varagu genotypes, as well as reveal which genotypes better adopts to water stress conditions using these parameters. From this assessment the most reliable parameter for drought tolerant, it is evident that the chlorophyll stability index (90 %), relative water content (88 %) and proline (980) is high in TNPsc 176 varagu genotype than the other genotypes.

Key Words : Chlorophyll content, Relative water content, Chlorophyll stability index, Proline yield, Water stress

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