

# **Proline and Total Protein Status as an Indication of Salinity Tolerance in Rice**

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## **ABSTRACT**

To elucidate the effects of salinity stress in rice, three different salinity tolerant varieties Jaya, Dandi, CSR-27 and one sensitive variety GR-3, were selected. Fifteen day old seedlings of these cultivars were exposed to 0, 100,150 and 200 mM of NaCl for 24, 48 and 72hr. Study on biochemical parameters revealed that Protein content was increased up to 150 mM, there after it decreased, proline content continuously increased with salinity levels in all the varieties. From this investigation, it can be concluded that tolerant varieties showed high values of proline and protein contents under salt stress conditions than sensitive variety. From this research we proved that GR-3 is sensitive to salt stress as well as remaining three cultivars jaya, Dandi and CSR-27 are tolerant.

**Key words** : Proline, Protein, Rice, Salinity.