

Study of Salinity Stress and Calcium Interaction on Morphological and Physiological Traits of *Vicia villosa* under Hydroponic Condition

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Abstract : For the study of salinity stress on *Vicia villosa* and calcium effect for modulation of that, an experiment was conducted under hydroponic condition, and some important morphological and physiological characteristics were evaluated. This experiment was conducted as a factorial based on randomized complete design with three replications. The treatments include salinity stress in three levels (0, 50, and 100 mM NaCl) and calcium in two levels (content in Hoagland solution and double content). The results showed that all morphological and physiological traits include root and shoot length, root and shoot wet and dry weight, leaf area, leaf chlorophyll content, RWC, CMS, and biological yield was significantly different from the control and is affected by the salinity stress severely. But, calcium effect on them was not significant despite of decreasing salinity effect.

Keywords : *Vicia villosa*, salinity stress, calcium, hydroponic

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