

Morpho-Physiological Attributes of Field Pea (*Pisum sativum* L.) Genotypes as Influenced by Salicylic Acid under Salinity Stress

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ABSTRACT

Salinity is major environmental factor that limits productivity of pulse crops all over the world. Field pea (*Pisum sativum* L.), one of the most important grain legume crops, is highly sensitive to salinity stress. Salinity stress adversely affects the morpho-physiological parameters, viz., germination, root length, plant height, number of leaves, leaf area, and total dry weight at vegetative growth stage of plant. In this investigation, salinity was induced in soil by the application of NaCl @ 50 mM, 100 mM and 150 mM in one shock followed by measurement of electrical conductivity (EC) for growing two field pea genotypes, viz., DDR 61, HUDP 15. Prior to sowing, seeds of both the field pea genotypes were hardened with salicylic acid (SA) @ 1.0 mM for 6 hours with a view to alleviating the harmful effect of salinity stress on morpho-physiological parameters of plants.

Key words: Germination, root length, plant height, leaf number, leaf area, total dry weight

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