

Interaction effect between humic acid and salicylic acid on seed germination and seedling growth of *Capsicum annuum* under salt stress

Authors:

**Mohammad Naser
Modoodi,
Hossein Nastari-Nasrabadi,
Mehdi Moradi and
Seyed Farhad Saberali**

Institution:

Faculty of Agriculture and
Animal Science, University
of Torbat-e Jam, Torbat-e
Jam, Iran.

Corresponding author:

**Mohammad Naser
Modoodi**

ABSTRACT:

In order to investigate the interaction effects of humic acid and salicylic acid on seedling growth of sweet peppers under different salinity stresses, a factorial experiment was carried out based on complete randomized design with three replications. Salinity factor was at six levels (0, 30, 60, 90, 120 and 150 mM of NaCl), salicylic acid at three levels (0, 0.5 and 1 mM) and humic acid at two levels (0 and 1.5 g/L). Results showed that germination percentage and shoot length were significantly decreased by increasing salinity, but the highest root length, seedling fresh weight, germination rate and seedling vigor were recorded in 30 mM of NaCl. In all stress levels, germination parameters were increased by salicylic acid and humic acid, and a positive cum significant correlation was observed between germination rate with seedlings and root length. According to the results, it can be recommended for the pre-treatment of sweet pepper seeds with 1 mM salicylic acid and 1.5 g of humic acid to obtain resistant and uniform seedlings under salt stress conditions.

Keywords:

Correlation, Germination percentage, Seed germination, Seedling fresh weight.