Seventh Article (Single- Published).

Article title	**Applications of ascorbic acid or proline increase resistance to salt stress in barley seedlings.**
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Article status	Single- published
The Journal	Biologia Planturum, ٥٨ (٢): ٣٤١-٣٤٧, ٢٠١٤.
Impact Factor	١.٨٤٩

Abstract

The present study was carried out to examine the effects of seed soaking in ١ mM ascorbic acid (AA) or ١ mM proline on the growth, content of photosynthetic pigments and proline, relative water content, electrolyte leakage, antioxidant enzymes and leaf anatomy of *Hordeum vulgare* L. "Giza ١٢٤" seedlings grown in greenhouse under ١٠٠ or ٢٠٠ mM NaCl. The plants exposed to the NaCl stress exhibited a significant reduction in growth, relative water content, leaf photosynthetic pigments, soluble sugars, as well as alterations in leaf anatomy. However, the treatment with AA or proline ameliorated the stress generated by NaCl and improved the above mentioned parameters. NaCl increased electrolyte leakage, proline content, and activities of antioxidant enzymes (SOD, CAT, and POX). The antioxidant enzymes and leaf anatomy exhibited considerable changes in response to AA or proline application in the absence or presence of NaCl.