ABSTRACT PROCEEDING BOOK OF ICAFOF CONFERENCE

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Cappadocia- Nevşehir/Turkey – 2017
Dear Colleagues

Welcome to the official site of International Conference on Agriculture, Forest, Food Sciences and Technologies (ICAFOF 2017 Cappadocia / Turkey). This three-day conference will be held in DoubleTree by Hilton Hotel Avanos – Cappadocia, Nevsehir, Turkey during May 15 - 17, 2017. The official presentation language of the ICAFOF is English or Turkish. But the abstracts should only be written in English in Microsoft Word. The conference will be organized by University of Nevsehir Haci Bektas Veli. The ICAFOF-Cappadocia 2017 aims at presenting current researches being carried out in the areas of Agriculture, Forest and Food for scientists, scholars, engineers and students from the universities, technologists, entrepreneurs and policy makers all around the World. Thus, The ICAFOF - Cappadocia provides opportunities for the delegates to exchange new ideas and application experiences face to face, to establish business or research relations and to find global partners for future collaboration. We hope that you can join us in the ICAFOF - Cappadocia 2017 with new insights. We look forward to welcoming you to Cappadocia, where is a fascinating nature wonder in Turkey.

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Physiological and Anatomical Effects of Ascorbic acid in Barley (*Hordeum vulgare* L.) Exposed to NaCl Stress

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**Abstract**

In this work, the effects of ascorbic acid (AA) pretreatment on the seed germination, seedling growth (coleoptile percentage, radicle length, coleoptile length, radicle number and fresh weight) and leaf anatomy of barley under both normal and saline conditions were studied. AA application partly increased the germination percentage, coleoptile percentage and radicle length of barley germinated under normal conditions while it partly reduced the coleoptile length, radicle number and fresh weight according to the control. In parallel with concentration rise, salt considerably inhibited the seed germination and seedling growth of barley. Whereas, the inhibitive effects of salt on the seed germination and seedling growth were dramatically alleviated in varying degrees by AA pretreatment. Moreover, salinity of the medium caused changes in the leaf anatomy of barley seedlings. AA affected in different degrees the various parameters of leaf anatomy of barley seedlings grown in both normal and saline conditions, and this difference was statistically important.

**Keywords:** Ascorbic acid, Barley, Germination, Leaf anatomy, Salinity, Seedling growth