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Effect of Irrigation with Sea Water on Germination and Growth of Lentil (*Lens culinaris Medic*)

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ABSTRACT

In an attempt to evaluate the efficiency of sea water irrigation on plant growth and germination, five cultivars of lentil ILL4400, 5582, 5845, 5883 and 8006 were grown in sandy soil and irrigated with sea water of different salinity levels (Ec 0.9-12). Percent of germination, seedlings lengths and mean germination time were recorded. The results showed that all cultivars were able to germinate at different salinity levels. The germination percent was increased. The percent of seed germination was significantly higher in cultivars ILL8006 and ILL5883. Sea water of salinities Ec3 and Ec6 was ideal for irrigation without negative impacts on lentil germination and growth. At higher salinity (Ec12) the germination rate was reduced and the mean germination time was greater than that in lentil seeds irrigated with sea water of Ec 0.9-9.

KEYWORDS

Lentil; Germination; Seedling; Salinity; Sea Water

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