



1. Title

Salinity Management When Irrigating with Marginal Quality Waters

2. Type

Commission Symposium: Comm. 3.6-Salt-affected Soils

3. Organizer(s) & Convener

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4. Rationale

Irrigated agriculture cannot be sustained at current levels in arid and semi arid regions of the world without the increased use of degraded waters, primarily treated municipal effluent or more saline ground waters. Increasing demands for fresh water and potentially decreased water availability associated with drought mean that agriculture cannot sustain current use, let alone increase irrigated acreage to meet the increasing demand for food. The only way to sustain current irrigation and productivity in arid and semiarid regions is to drastically increase the use of degraded and more saline waters for irrigation. Improper use of these waters may result in salinization or degradation of the irrigated soils.

5. Objectives

1) Describe successful management practices or recommendations that enable productive use of saline or degraded waters while minimizing water use, soil degradation and maintaining crop production.

2) Measurements and predictions of long term changes in soil chemical and physical properties associated with use of degraded waters.

3) Case studies of use of degraded waters for irrigation; field results and/or modeling studies.

6. Description

The symposium will have two invited speakers; one on management practices for crop production on saline soils or irrigation with low quality waters and the other on a large scale field/modeling study. We will also have an accompanying poster session with an expected 50 posters.

