

## Estimating Leaching Fraction Requirements

The leaching fraction is the amount of extra irrigation water that must be applied above the amount required by the crop in order to maintain an acceptable root zone salinity depending on the salinity of the water it is being irrigated with. To estimate the needed leaching fraction required, decide what soil salinity will be acceptable. Then find the EC (ds/M) of the water you are irrigating with. The section where these two lines intersect is the percent of water over and above the crop requirements that must be applied to maintain the desired

EC in the root zone. For example, corn can tolerate a root zone salinity (EC) of 1.7 ds/M. If you irrigate consistently with water with an EC of 1.0, you will need to apply 30% more water than the crop needs to keep from exceeding 1.7 ds/M in the root zone.

These relationships were determined with normal irrigation water. Since some of the EC in lagoon water comes from ammonium and potassium, both of which can be expected to be utilized by the crop, it is possible that the actual leaching fraction needed will be somewhat less than indicated by this chart.

