

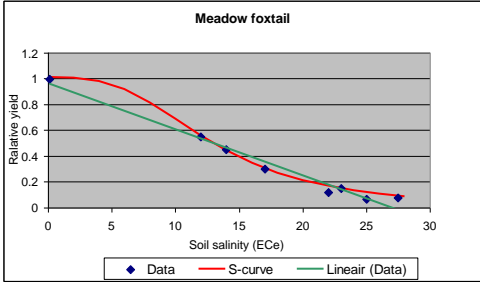
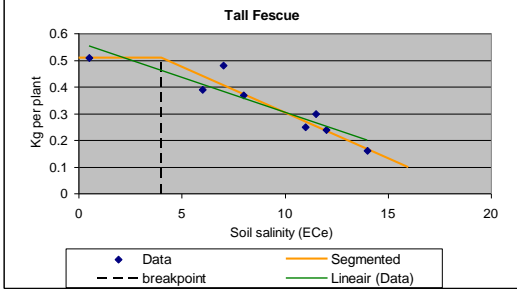
M. Th. Van Genuchten and S.K. Gupta, 1993. *Reassessment of the Crop Tolerance Response Function*. Journal of the Indian Society of Soil Science, Vol. 41, No. 4, pp 730-737 (1993). On line:

https://www.ars.usda.gov/ARSUserFiles/20360500/pdf_pubs/P1295.pdf?origin=publication_detail

M. Th. Van Genuchten and G.J Hoffman, 1984. *Analysis of crop salt tolerance data*. On line:

https://www.researchgate.net/publication/238185339_Analysis_of_crop_salt_tolerance_data

The next two figures are from the same sources.

<p>Van Genuchten and Gupta:</p> <p>Relative yield of meadow foxtail versus soil salinity (ECe in dS/m). The deviation of the S-curve from the straight line, therefore, has no experimental justification because there are no data in this part.</p> <p>Beyond $X = 12$ dS/m, the differences between the S-curve and the straight line are negligibly small. The use of the S-curve in this case is not justified.</p> <p>The correspondence between the S-curve and the observations is amazingly high. This may give rise to the question: have the data been manipulated?</p>	 <p>The red line shows the fitted S-curve, while the green line represents a simple linear regression. In the range between $X = 1$ dS/m to $X = 12$ dS/m there are no data. #)</p>
<p>Van Genuchten and Hoffman</p> <p>Relation between yield of tall fescue in kg/plant (Y) and soil salinity (ECe in dS/m, X). The comments made above are equally relevant here.</p> <p>The determination of the breakpoint (at X between 4 and 5) as a tolerance index is questionable as the straight line (in green color) seems to be statistically the most appropriate solution here.</p>	

#) Plants normally grow well in soils with an ECe value less than 6 dS/m, while beyond that value the yields decline. It is strange that in this figure the data (except one) are all in the uninteresting range of low production.